

THE LOGGER'S BARK

a magazine

Radio Club of Tacoma



NEW! Venus SW-6B!
QRP Rig p. 60

In this issue:

- **New! "The Frugal Ham" column p. 45**
- **Preview of Venus QRP Transceiver p. 60**
- **"I'm Not Dead Yet!" K7MO FCC fiasco p. 26**
- **Build an AMSAT *CubeSat Simulator!* p. 36**
- **A look back— Century 21 Transceiver p. 62**
- **10 tips for new hams: shack set up p. 65**
- **Historic "Code Talkers" piece in museum p. 37**

Drone photo by:
Dave W7UUU

Trent, Daniel and
a smiling Enrique
at 80 feet atop
the club tower to
roll on fresh
galvanizing paint
last month.

www.W7DK.org

Radio Club of Tacoma
1249 South Washington Street
Tacoma, WA 98405
253-759-2040

W7DK

Open House every Saturday
10:00 AM to 2:00 PM
Last Saturday every month is
Swapmeet Day

Radio Club of Tacoma

Founded 1916

W7DK 2024 OFFICERS

AND COMMITTEE LEADERS

EXECUTIVE COMMITTEE:

President: Mike Mikuchonis W7XTZ
Vice President: Adam Barbera W2NCC
Secretary: Gary McAdams WG7X
Treasurer: Steve Dightman AF7YD

BOARD OF DIRECTORS:

Board: Mike Drorbaugh W7MKE
Board: Paul Matney W7PFU
Board: Doug Schafer AB7DG
Board: Red Cranefield WB7EC
Board: Phil Pia K7PIA

KEY COMMITTEE CHAIRPERSONS:

Membership: George K7GRS/Mike W7XH
Salmon Run: George K7GRS/Mike W7XH
Infotech/IT: Randy WB4SPB
HF Operations: Phil K7PIA
Facilities: Adam W2NCC
Property Mgmt. Red WB7EC
Museum: Dan KD7SV
Planning: Manny AD7MA
POTA: BJ WA7WJR
General Meeting: Dave W7UUU
Bark layout & Editor: Dave W7UUU
Assistant/Copy Editor: Anne N7ANN

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**But don't stop there! Each issue is
50 or more pages of fun and cool
stuff to explore! Scroll on!**

HAVE A SUBMISSION FOR OUR NEXT ISSUE?

loggersbark@gmail.com

PRESIDENT'S CORNER

Monthly ruminations from our President

Mike Mikuchonis
W7XTZ

OUR PRESIDENT, Mike W7XTZ, was drawn away this month on an important Presidential *Top Secret* mission abroad, in efforts to improve the Amateur Radio World for all time and for all hams everywhere, and most especially for us, the Radio Club of Tacoma! He will (hopefully) be back next month. Stay tuned! ■ -editor



I'LL GLADLY PAY
TOMORROW FOR
A
PRESIDENT
COLUMN TODAY!



PRINT
TO
PLAY!

US Presidents Word Search

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R R Z O V F M E J E F F E R S O N I E Q Y K Y C
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J F A C K S O N Q V L H T Z C A R T E R J Y O J
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JACKSON
TRUMP
REAGAN
MONROE
JOHNSON
HARDING
EISENHOWER
BUSH

VAN BUREN
TRUMAN
POLK
MCKINLEY
JEFFERSON
GRAND
COOLIDGE
BUCHANAN

WILSON
TAYLOR
PIERCE
MADISON
HOOVER
GARFIELD
CLINTON
BIDEN

WASHINGTON
TAFT
OBAMA
LINCOLN
HAYES
FORD
CLEVELAND
ARTHUR

TYLER
ROOSEVELT
NIXON
KENNEDY
HARRISON
FILLMORE
CARTER
ADAMS

FROM THE DESK OF THE VP

Insights from our Vice President

Adam Barbera
W2NCC

CONNECTING GENERATIONS THROUGH PASSION

In a time where technology and innovation bring change every few years, ham radio has not lost its appeal. We are seeing a new generation of young amateurs who are joining the community and learning from seasoned operators. It is becoming increasingly apparent at the clubhouse and at events, that interest in Ham Radio is cross-generational.

Over the last 2 or 3 years, there has been a shift in the age of hams at the club. We are seeing younger people receiving their amateur radio licenses. Teenagers like Max **KK7HAY** and Nathan **KK7QND**, who participate at our Saturday open houses, are examples of this change. Their eagerness to explore a technical hobby like ours, despite the lure of competing gadgets like smart phones, is a testament to ham radio's appeal even in this modern age.

What makes this knowledge exchange particularly special is the support that these young operators receive from seasoned experts. Some of the oldest hams at the club, with their wealth of knowledge and experience are mentoring the youngest members. They generously share their technical expertise, and explain complex concepts. The generosity of older hams extends beyond providing advice. Many have gone the extra mile by donating equipment to help young operators build their own stations. Community spirit is a cornerstone of the ham radio culture, illustrating the deep camaraderie that exists within the hobby.

For any club like ours, wishing to secure its future,

fostering a cross-generational exchange of knowledge is essential. It's about more than just getting young hams licensed; it's about creating opportunities for them to learn, to grow in the hobby, and mentor other new hams in as they gain their own experience. Hosting workshops (4th Wednesday activities), organizing events like Field Day and "Get on the Air" days at the clubhouse, and encouraging collaboration between the older experienced hams – all of this can create a vibrant, supportive environment and we're seeing that very thing at the clubhouse today.

Ham radio's ability to bridge generational gaps is one of the most remarkable aspects of our community. As we look to the future, let's continue to support and involve these young hams who have started coming around, ensuring that the love for amateur radio remains strong for everyone.

Until next month... 73!

-Adam **W2NCC**, Vice-President



Left: Nathan **KK7QND**, age 16. Right: Max **KK7HAY**, age 14, receiving his membership certificate—he joined at age 12!

SECRETARY'S REPORT

W7DK Secretary—Gary WG7X



PROPAGATION: WHY IS IT SO CRUMMY NOW?

Look at the picture on the right. This was taken today off the QRZ.com front page. August 12th, 2024. I was not aware that we had an Aurora last night until two things happened.

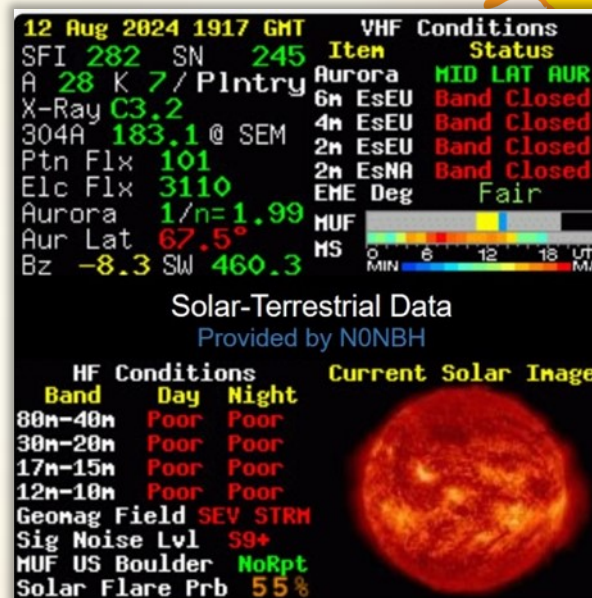
First, I turned on the radio this morning and heard absolutely nothing on any band. Nada, none, zip!.

Then, later this morning a friend of mine (yes, I have a few of those) sent me some pictures that he had taken last night at about 11:45 PDT last night. They were taken at his cabin out in the boondocks a little west and north of Seattle, Washington. Since there was so little light pollution out there, there were some pretty clear pictures of the aurora. I was miffed because I had missed the aurora, and because of the aurora, there were and still are no signals on the band. I am sure that it will pass as all the other solar emissions have so far. Flares, CME's, proton storms, we have seen it all this year and all these events affect us poor hams down here on earth.

Well, complaining about it will not help but I for one am really hoping that the solar cycle will get back to something helpful to ham radio operators soon!

I have been through three complete solar cycles so far and I would like to see another good, not necessarily great, but good solar cycle before I go on that big DX-pedition in the sky!

Patience is key, I suppose... But darn it, DX and contest season are on the near horizon, and it would be great to get some new ones in the log and maybe work a contest or two—before old Sol goes back to



sleep for another six or seven years...

That said, there is a lot of low band DX that we can chase in the low Maximum Usable Frequency (MUF) times too, so we can do that also when conditions change again as they certainly will.

My issue is that ten meters is my favorite band and high MUFs are almost required for the weird and exotic DX stations to show up. The fun of ten is that there are a lot of low power operators out there who convert CB radios to ten and a lot of other QRP operators on the ten-meter band.

So, here's my request to the big fellow up there who's in charge of Ol' Sol: Please quit messing around with the settings already. Just put them on the DX setting and let it stay there for a year or so, OK?

73 for Now...

-Gary WG7X



WONDERFUL BARK NEWS to report this month!

If you had read my column in this space in the August edition, you would have learned that there is a serious issue starting to invade Microsoft Publisher 365

Microsoft has announced that Publisher will be completely removed from all new Office 365 subscriptions purchased beginning February 2024. And further, that not only will all support end in October 2026, but the app will simply disappear from those who (like me!) have been paid subscribers for years.

That's the downside of the modern software norm of "subscription based". Users no longer actually own the software—they just subscribe, like a magazine. Should the publisher (Microsoft in this case) decide to not only stop supporting, but also stop providing access to a component of that subscription, tough luck!

All would be OK in the case of my tenure as editor—my term will end December 2025 (this is typically a 2-year term just like all other club positions).

However, Microsoft, as part of an evolving partnership with Adobe (the PDF people) have already stopped support of the exporting of Publisher documents to PDF. Only small publications or "flat files" (no hyperlinks) or all black-and-white publications will export to PDF. Anything with the complexity of The Bark crashes out before the conversion is complete, or badly renders the page layout, colors, or link performance of the original.

I became aware of this on August 30th, as I was preparing to publish the issue. When it didn't work, after trying 4 different computers and with an outside opinion (that of our own Stephen AD7AB), I had to go into

"controlled panic mode" to find a solution.

That came in the form of Office 2010, installed on an old laptop. I found that the older software, being "installation based" rather than subscription, worked as it should. Well, almost.

More astute readers may have noticed a lot of subtle (and some not so subtle) graphics changes. This was because the 2010 version had not yet added a number of graphical niceties that appear on almost every page of *The Bark*. So I had to convert a great many pages to conform, and downshift lots of nice graphics to conform to the old software's rules. I didn't like much of the results, but I had no choice so rolled with it and published right on time on the 1st.

On the 31st I took a chance and ordered a sealed Publisher 2013 DVD on eBay, in hopes that by that release, some of the graphical elements would be present and supported.

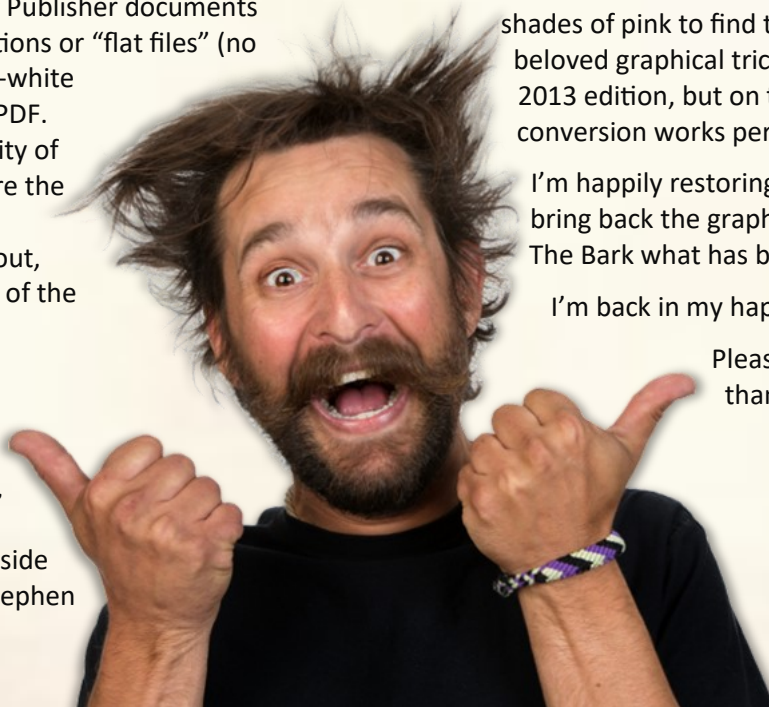
Well, I'm delighted to report—the software arrived today (August 2nd), and I promptly installed it on a different computer that's not on the internet (lest it "learn" about the Microsoft PDF situation!). I was tickled twenty shades of pink to find that virtually ALL of my beloved graphical tricks are fully supported in the 2013 edition, but on top of that, the PDF conversion works perfectly!

I'm happily restoring things, page by page, to bring back the graphical niceties that help make The Bark what has been since January.

I'm back in my happy place!

Please enjoy this issue and thanks for reading.

-Dave W7UUU





GREETINGS FROM MEMERSHIP, Club Members!

An update on our efforts toward online forms and payments. Many of you might have already seen the forms and [Donate with PayPal](#) on our website. YEAH!

We actually rolled them out much sooner than I had anticipated. With some help from the extension developer in Greece, online membership, ARRL and salmon run forms are operational with PayPal, Venmo and credit/debit cards. We brought them online on July 27th. It has been reported that not all browsers are equal in how they display the forms. All I can say is don't use Edge!

By the time this article is published, The Radio Club of Tacoma badges will also be [offered as an online](#) item. I hope that your experience with our online forms and payment goes smoothly. I expect some kinks may develop and should they please report them to membership@w7dk.org. I will do my best to sort it out.

Salmon Run is just 3 weeks away! Please get your pledges in and see Gary **WG7X** if you would like to participate in radio operations during the Salmon Run contest.

I did mention last month that I hope some of this year's fundraising efforts could be used to offset the cost of re-galvanizing our tower. That work has been completed, hopefully the tower will see another 60 years of service.

I would like to recognize some of our members. I was reading recently of a club celebrating their 50th anniversary as a club. That is a great accomplishment indeed. I would like to honor Tim **K7HF** who has been a member of our club for 50 years!

I would also like to honor the following members who have been members *for over 40 years*: Jerry **K7ETU**, Jeffrey **W7JFF**, Joseph **KD7LJ**, Angela **KC7EQ**, Robert **N7BUW**, Paige **W0FLZ**, Walter **KA7IOX**, Thomas **N7CFI**, Mark **W7MRK**, Dave **W7UUU**, and Harry **N7DOE**. Thank you for your years of support! Dave, you will make 50 next year! [*thanks for the reminder! - editor*]

A reminder to our members: nominations begin this month for new club officers and board members. It is important for our club for you to be involved with the process! Leadership and direction is becoming *so vital* as members are aging out (SK) - we need *leadership who are forward thinkers* to be engaging the next generation of amateur radio operators. *Your* opinions matter, *your* vote matters. Ballots will be in the mail after the October general meeting.

As always, please reach out if you have any questions, membership@w7dk.org

-73—Mike **W7XH**

HAM RADIO WORLD NEWS

Amateur radio events from around the world

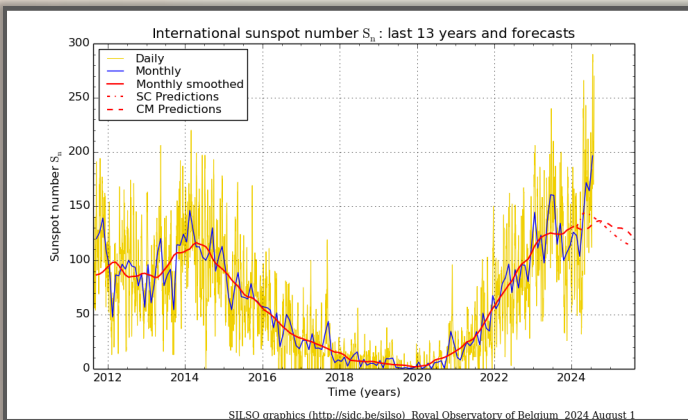


W7UUU

SOLAR CYCLE 25 PRODUCING RECORD HIGH SUNSPOT NUMBERS

08/15/2024

By: Frank Donovan, **W3LPL**



Editor's note: This article was written earlier in the week. The latest measurements show even higher numbers. See this week's **K7RA** Solar Report in The ARRL Letter for latest information.

Record High Solar Cycle 25 Solar Maximum Sunspot Numbers Have Improved HF Propagation Since Mid-July and Possibly Bringing Worldwide 6 Meter F2 Propagation This Fall.

According to the NOAA Space Weather Prediction Center (SWPC), Solar Cycle 25 likely reached its highest sunspot number yet of at least 299 on August 8th.

www.swpc.noaa.gov/news/solar-cycle-25-likely-reached-highest-sunspot-number-over-20-years

The World Data Center - Sunspot Index and Long-Term Solar Observations ([SILSO](http://silso.wdia.ac.cn/)) publishes near-real-time Estimated International Sunspot Number (EISN) reports based on its global network of reporting stations. Daily EISN reports during Solar Cycle 25 were consistently well below 200 until suddenly rising to 218 on July 14th and reaching 289 on July 18th, but then declining to 178 on July 22nd.

While occasional brief daily EISN increases are not unusual during solar maximum, after only five days, the daily EISN suddenly rose to 212 on July 27th reaching a Solar Cycle 25 record high 297 on August 8th and remaining mostly well above 200 through this writing on August 11th.. Daily EISN reports are likely to remain well above 200 during most days through late September and possibly much longer.

Since February 2002, worldwide 6-meter propagation has been mostly limited to sporadic occurrences of trans-equatorial propagation (TEP) near the equinox

months and occasional sporadic -E propagation reaching many thousands of miles during June and July. Worldwide 6-meter F2 propagation may again occur -- perhaps very frequently - - starting in late October 2024 if daily EISN reports consistently remain well above 200.

See www.sidc.be/SILSO/eisnplot.

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ARRL NEWS & VIEWS



W1AW

David Galletly, KM2O, Named Vice Director of the ARRL Hudson Division

08/09/2024

David Galletly, KM2O, has been appointed Vice Director of the ARRL Hudson Division. ARRL President Rick Roderick, K5UR, appointed Galletly to the remainder of the term ending in December, 2024, following the promotion of former Vice Director Ed Wilson, N2XDD, to Hudson Division Director.

Galletly has been active in amateur radio since 1998. An ARRL Life Member, he is a member and past President of the Albany Amateur Radio Association, Treasurer of the Hudson Valley Contesters and DXers and President of the Albany County ACES Radio Club. He served for over a dozen years as Section Emergency Coordinator of the ARRL Eastern New York Section. His interests include contesting, chasing DX, ARRL Field Day, award chasing (8-Band DXCC, WAS, WAZ, VUCC, DXCC Challenge, IOTA), hunting and activating POTA®, instructing license classes, assisting in VE sessions, and staying active in emergency communications and public service activities.

Galletly is retired Senior Vice President of WAMC Northeast Public Radio, a regional network of stations, where he had a 35-year career. He was

responsible for operations, programming, and finance of the NPR member stations. He earned a BA in Communications and MS in Education from the University at Albany, as well as a certificate in Management Development for Public Broadcasting Executives from the Wharton School of Business and the Corporation for Public Broadcasting. Upon retirement, WAMC's newsroom was named in his honor. Galletly was the station's first News Director.

The ARRL Hudson Division is comprised of the ARRL Sections of Eastern New York, New York City - Long Island, and Northern New Jersey. - *article & photo ©ARRL Inc.*



David Galletly, **KM2O**, has been appointed Vice Director of the ARRL Hudson Division

MEMBER SPOTLIGHT

By W7UUU



Paul Matney W7PFU

Paul Matney, W7PFU, is one of the quiet heroes of the Radio Club of Tacoma. He's been the Clubhouse Chef for many years, diligently serving up great meals for members not only at the Clubhouse on "Last Saturday Swapmeet Day" but also at every Field Day and annual Kirkreit Picnic event (most recently just last August 4th). He's also a multi-term BOD member and loyal donor to the club. Thanks for all you do, Paul!



Jim **N3AWS** in Moss Point, Mississippi was the first to find the "Hidden Word" (Vibroplex) in the August Bark issue almost instantly so he was the winner of the US QRZ Stickers package prize!!

Dear Editor,

Hello!

The hidden word "Vibroplex" is on page 65!

Excellent work, by the way. Congratulations.

73 de Fernando, **EA4BL**.

Spain

Thanks Fernando for being first DX spotter of the hidden word for last month...

I just mailed some stickers for you – when you get them, take a photo holding them and I will publish it in the next edition of The Bark! Thanks & 73! -ed.

From QRZ,

Another exceptional issue!
Thanks!

Chip—**W9OQI**
Wisconsin

From QRZ,

Another great job—thank you from New Zealand.

Gordon—**ZL3XZ**

From QRZ,

Now I have something to look forward to tomorrow with my morning coffee!

Ronnie—**NZ4X**
Florida

From QRZ,

It was nice reading about the W7DK Field Day. Glad you had such good luck and it sounds like you had very good preparation.

73

John—**KT4PH**
Virginia

Errata from Previous Issue

Page 19, lower left picture—wrong caption. Should be Tom **W7TJL** and not Bob **AD7LJ**. Sorry guys—"copy/paste booboo"

Page 65, FlexRadio model is 8400M not 8500M



AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK



Photo by W7XH

President Mike **W7XTZ** (right) presents Max **KK7HAY** with his membership certificate. Secretary Gary **WG7X** looks on. Max joined at age 12 (he's now 14)!



Photo by W7XH

Max **KK7HAY** proudly showing off his certificate



Photo by W7MKE

Another W7DK Youth Member... 16-year-Old Nathan **KK7QND** trying out the Flex station in the HF room
Saturday August 10th



Photo by W7XH

Planning Committee head Manny **AD7MA** helps with carpet cleaning in the clubhouse on August 1st

Photo credits this page as noted

Got pictures from the clubhouse? Send 'em in!



AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK



Nolan **K7GBM** checking out the goodies on the clubhouse "Free Table" on August 10



Camp Quest Northwest's Becky **KG7FZH** hangs out in the clubhouse with Nathan **KK7QND**



Mike **W7MKE** hanging out at the Flex station in the HF room.... >



...David **AC7KP** looks on....

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by
Dave **W7UUU**

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK



Bob **K7MXE** pays a visit to the W7OS Memorial Museum room at the clubhouse



Always with a smile, Paul **W7PFU**, the Club's chief chef, stops by the clubhouse on August 10th



Walt **WA7SDY**, a regular on Saturdays at the Clubhouse, schools members on VNA technology



In the W7OS Museum, Randy **WB4SPB** prepares to spectrum-analyze the oscillators in the vintage Eldico transmitter (low over his right shoulder)

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by
Dave **W7UUU**

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



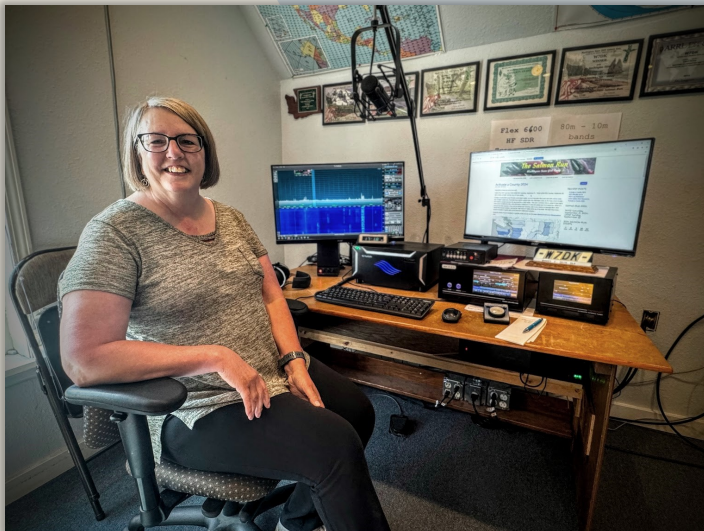
W7DK



VP Adam **W2NCC** looking dapper as usual
on August 10th



Warren **NG7G** gives a big "thumbs up"



Anne **N7ANN** takes a seat at the Flex station!



Lloyd **AG7CX** honors the rule, "Take the last cup,
make the next pot"

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by
Dave **W7UUU**

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK



Joe **KF7PXB** studies up on antenna theory over a donut on August 17th



Nolan **K7GBM** hanging out with David **AC7KP** in the classroom



L>R: Anne **N7ANN**, Gary **WG7X** & Mike **W7MKE** visiting in the HF room



VP Adam **W2NCC** points out the new code-access lock recently installed on the kitchen door

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by
Dave **W7UUU**

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK



L>R: BJ **WA7WJR**, Adam **W2NCC**, and Randy **WB4SPB** discuss a recent donation to the PMT



BJ **WA7WJR** starts digging in and making sense of what this donation is all about



VP Adam **W2NCC** tries out a metal detector up for sale by a member.... Found a nice lode of screws and nails but the treasure is still lost!



The gang's all here! Sunny Saturday hanging out in the Lou Room downstairs radio room

Got pictures from the clubhouse? Send 'em in!

All photos this page provided by
Dave **W7UUU**

AROUND THE CLUBHOUSE

Recent Photo highlights from the Clubhouse



W7DK

B'jaia Benavari	KG5ZIF
Cade Kennedy	KK7OUZ
Donna Stewart	KI7GOC
Judith Kirkreit	AJ7R
William Hodge	N6TO
Paul Palinkas	K7PJP
Kathryn Dalley	KK7IST
Howard Crane	NY6W
Paul Skyllingstad	KE7CET
Robert Purdom	AD7LJ
Mike Shuster	AF7VW
Ronald Baker	KD7QKU
Jeremy Keddie	W7WAG
Nolan Glenn	K7GBM
Franky Marsh	KF7FEF
Eve Redd	KF7SOX
Paul Saunier	W7GAN
Mark Kerr	KK7AIV
Cecil Burleson	K7HW
Adam Barbera	W2NCC

September Birthdays!!



Stephen **AD7AB** (L) visits with fellow club teacher David **N7HT**



Walt **WA7SDY** and Ellen **AI7FP** hanging out in the classroom on August 17th

Top photo by Anne **N7ANN**

Bottom photo by Dave **W7UUU**



Anne **N7ANN** and Dave **W7UUU**
caught a quick moment for a selfie



Joy and Mike **W7XH** having a great
time at the picnic!



Mike **W7MKE** with Wife Michele have fun times with
granddaughter Harper



Donna and BJ **WA7WJR** arriving for the picnic

All photos this page by Dave **W7UUU**



So nice to see Florence and Ollie **AD7CC** show up at the picnic!



Sandy and Doug **AB7DG** catching some sun waiting for the event to get rolling!



Florence and Anne **N7ANN** catch up



Secretary Gary **WG7X** shares a conversation with Mike **W7MKE**

All photos this page by Dave **W7UUU**



Kirk, Son of Paul **W7PFU** and his son Jesse,
grandson of Paul



Chef Paul **W7PFU** working the grill with a
bunch of burgers going on!



Chef Paul **W7PFU** gets a chance to
sample his goods!



Three generations of Paul **W7PFU**'s family!
L>R: Son Kirk, Jesse, Paul **W7PFU**, and his wife Lana

All photos this page by Dave **W7UUU**



David **AC7KP**, Walt **WA7SDY**, and Phil **K7PIA**
sort out firing up the Elecraft QRP rig



President Mike **W7XTZ** hangs out
with Whit **KG7LNZ**



Facilities Manager & VP Adam **W2NCC** (left) chats it
up with member Bob **K7MXE**



Walt **WA7SDY** checks out the picnic goodies

All photos this page by Dave **W7UUU**



Geek Shirts on display! Adam **W2NCC** (left) and Al **N7OMS** show theirs off with pride!



As does Nick **K7MO** with his stack of "boat anchor" radios as a "Heavy Equipment Operator"



Al **N7OMS** looks on as President Mike **W7XTZ** tries to convince Al how big was the fish that got away!



Whit **KG7LNZ** always with a smile

All photos this page by Dave **W7UUU**



Leonard **KA7NWF** focuses on filling in his squares in the RINGO game!



Sandy, Doug **AB7DG**, Donna, and Charles **AE7PC** focusing on RINGO



We had a really nice turnout this year!
Weather cooperated quite nicely



BJ **WA7WJR** (right) chats it up with Charles **AE7PC**

All photos this page by Anna **K7ANA**



HF Committee Chair Phil **K7PIA**
playing "RINGO" (Radio Bingo)



RINGO caller Dave **W7UUU**



Best shelter in the park, Shelter 1... it's been our
picnic home for a number of years now



Al **N7OMS**, Cathi **KG7RTQ**, and President Mike
W7XTZ all focus on their RINGO cards!

All photos this page by John **N7TES**

I'M NOT DEAD YET!

FCC'S LAURA SMITH TO THE RESCUE



Monday, July 1, 2024

To Whom It May Concern:

Please cancel call sign K7MO pursuant to Amateur Cancellations 97.31. A dated obituary posting is attached.

Sincerely

REDACTED



The notice filed with the FCC on July 1 canceling Nick's **K7MO** license due to his being deceased!!



At the picnic, Nick **K7MO**, *very much alive*, regales a group of friends of the craziness of this whole episode!

"The reports of my death are greatly exaggerated"

On July 1, a well-meaning but ill-informed ham reported that Nick **K7MO** was a Silent Key, and even provided an obituary to prove it! Except it was the obituary notice from Nick's father, Joseph Nicholas Winter (our Nick is actually a Jr.) The person reporting this didn't bother to notice in the obituary that Joe Winter Senior's call sign was **WZ7M**, right there in the text of the notice! And whoever from the FCC processed the "complaint" *also* didn't bother to read the obituary! On July 13th, Nick pinged me—he noticed his call sign was gone from QRZ. I reviewed his QRZ account and quickly learned his call had been *canceled*, and in 22 days would go into the Vanity Pool and would be gone!! As soon as I told him this, Nick immediately got on the phone, and according to Nick, none other than **FCC Special Counsel Laura Smith** herself took on his case. She promised to investigate and call him back, and by gosh in just a few days did just that and restored his call sign. It's really impressive that the top person in the amateur radio department at the FCC acted *fast* to right this wrong! **Big thanks to Special Counsel Smith!** As reported by Nick **K7MO** ■ -editor



Says Nick, FCC Special Counsel Laura Smith personally handled his case—super responsive, all done over the phone, complete with call-backs! Very impressive!

Photo from [HamRadioNow](https://www.hamradio-now.com)

THE WAY BACK PHOTO BOOTH

Highlighted photos from the club's past

Researched & Compiled by the Editor



Photo:
Jim



Ethel Devish, **W7WLX** (left) wife of Roy Devish **W7AZI** with Vivian Huntley wife of Scotty Huntley, **K7CYZ**, in the clubhouse kitchen ca. 1968



Roy Devish **W7AZI** napping in his "reserved bunk" at a Field Day event ca. 1970



Roy Devish **W7AZI** (center) in what is now the club classroom. The station radio console table against the wall

THIS MONTH'S CALENDAR

Always check the W7DK website for latest news

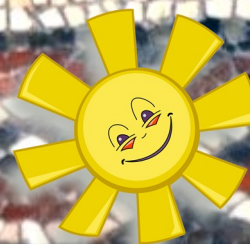


W7DK

August		September, 2024				October	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1 36 10m Social Net	2 Slow Speed CW Net	3 Tuesday Nite Net	4 07:00pm Board meeting	5	6	7 Flaming Geyser POTA Open House 10-2	
8 37 10m Social Net	9 Slow Speed CW Net	10 07:00pm VE License Exam ... Tuesday Nite Net	11	12	13	14 01:00pm General meeting ... Open House 10-2	
15 38 10m Social Net	16 Slow Speed CW Net	17 Tuesday Nite Net	18	19	20	21 Open House 10-2	
22 39 10m Social Net	23 Slow Speed CW Net	24 Tuesday Nite Net	25 4th Weds. Activity	26	27	28 Last Saturday hotdogs and Mini Swap Meet	
29 40 10m Social Net	30 Slow Speed CW Net	October	October	October	October	October	

Did you know?

September (from Latin *septem*, "seven")
September was originally the seventh of ten months on the ancient [Roman calendar](#) that began with March ([mensis Martius](#), "[Mars](#)' month"). It had 29 days. After the reforms that resulted in a 12-month year, September became the ninth month, but retained its name



RCT Bulletin Board

Posted notes and other important stuff

Here's a **useful tip** when reading the Bark: if you want to view a link, "right click" > "Open link in new window"... that way you won't lose your place in the Bark!

IMPORTANT NOTE: The Logger's Bark does not use ChatGPT or other AI creation sites to write articles. Sometimes graphics are AI generated out of need for license-free images, but NEVER is the text. We don't allow AI generated article submissions ■ -editor

Last month (August) there was no "Mystery Member" due to the Microsoft / Adobe PDF snafu—the page had elements that couldn't convert... but the Mystery Member is back this month! See page **38**

Last Month's Hidden Word: **Vibroplex**
It was hidden in the "The New Hot Thing" page (65) of the August Bark!
See if you can find this month's Hidden Word (see page 59) and win some QRZ stickers mailed directly to you!





HUGE THANKS TO Mr. Bruce Horn, **WA7BNM** for publishing his "[Contest Calendar](#)" for all these many years... a truly wonderful resource for finding virtually every ham radio contest on Earth that might be happening, in most any mode and most any region in the world. Follow the link to take you to the site, then sort through the various options to find the specifics

of every upcoming event. For now, here's the **WA7BNM** Contest Calendar for the this month. Click the calendar below to visit Bruce's site directly.



September 2024

+ Tennessee QSO Party	1700Z, Sep 1 to 0300Z, Sep 2
+ MI QRP Labor Day CW Sprint	2300Z, Sep 2 to 0300Z, Sep 3
+ ARS Spartan Sprint	0000Z-0200Z, Sep 3
+ All Asian DX Contest, Phone	0000Z, Sep 7 to 2359Z, Sep 8
+ Wake-Up! QRP Sprint	0600Z-0800Z, Sep 7
+ IARU Region 1 Field Day, SSB	1300Z, Sep 7 to 1259Z, Sep 8
+ AGCW Straight Key Party	1600Z-1900Z, Sep 7
+ PODXS 070 Club Jay Hudak Memorial 80m Sprint	2000Z, Sep 7 to 2000Z, Sep 8
+ CWops CW Open	2000Z-2359Z, Sep 7
+ North American Sprint, CW	0000Z-0400Z, Sep 8
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Sep 9
+ WAE DX Contest, SSB	0000Z, Sep 14 to 2359Z, Sep 15
+ FOC QSO Party	0000Z-2359Z, Sep 14
+ SKCC Weekend Sprintathon	1200Z, Sep 14 to 2359Z, Sep 15
+ ARRL September VHF Contest	1800Z, Sep 14 to 0300Z, Sep 16
+ North American Sprint, RTTY	0000Z-0400Z, Sep 15
+ BARTG Sprint PSK63 Contest	1700Z-2059Z, Sep 15
+ Run for the Bacon QRP Contest	2300Z, Sep 15 to 0100Z, Sep 16
+ NTC QSO Party	1900Z-2000Z, Sep 19
+ AGB NEMIGA Contest	1600Z-1700Z, Sep 20
+ ARRL 10 GHz and Up Contest	0900 local, Sep 21 to 0759 local, Sep 23
+ Scandinavian Activity Contest, CW	1200Z, Sep 21 to 1200Z, Sep 22
+ Texas QSO Party	1400Z, Sep 21 to 2000Z, Sep 22
+ New Jersey QSO Party	1400Z, Sep 21 to 0159Z, Sep 22
+ QRP Afield	1500Z-2100Z, Sep 21
+ Wisconsin Parks on the Air	1600Z-2300Z, Sep 21
+ Washington State Salmon Run	1600Z, Sep 21 to 2359Z, Sep 22
+ New Hampshire QSO Party	1600Z, Sep 21 to 2200Z, Sep 22
+ SKCC Sprint	0000Z-0200Z, Sep 25
+ CQ Worldwide DX Contest, RTTY	0000Z, Sep 28 to 2359Z, Sep 29
+ Maine QSO Party	1200Z, Sep 28 to 1200Z, Sep 29
+ AGCW VHF/UHF Contest	1400Z-1800Z, Sep 28



In Memoriam

Silent Keys & Friends Remembered



In memory of
Joe Lester, K7ZG
1948-2024

As reported by Randy, **WB4SPB**:

"I am heartbroken to report that Joe Lester **K7ZG** became a Silent Key on Friday 8/9/24. His daughter Chau called me this afternoon to tell me that Joe signed off unexpectedly, quickly and peacefully on Friday evening.

Although we saw him at the clubhouse a few times recently, health problems prevented Joe from being active in the club during the last 5 or 6 years. He was a lifetime member, club Treasurer 2009-2010 and, frequently, our legal consultant on intellectual property matters (his profession before retirement). He was a fine CW operator.

In 2012, Joe cajoled me into becoming active in the club's inner circle as a Saturday host and in organizing Straight Key night. A few years later he talked me into taking over the website, which he had implemented in its current form (using the Joomla content manager). For many years, we had regular Saturday morning breakfasts at the Shakabrah Java cafe on 6th Ave. in Tacoma before finding our way to the clubhouse.

Joe leaves behind many friends and colleagues in the club and will be missed by many.

73, with fond memories of Joe"

Randy **WB4SPB**





All photos this page by AI N7OMS

THE W7DK ELMER BOARD

Do you have a skill or tool to help new hams?



W7DK

YOU! YES YOU! Do YOU have a skill you could pass on to new amateur radio operators? Do you possess a skill or piece of gear that you're willing to share with others to fix antenna problems, diagnose noise issues, drive a ground rod, teach Morse, help teach technical topics? If the answer is YES you too could be a W7DK Elmer!! Let any

officer know what your skills are or how you could help new hams get a leg up on the hobby. And if you're one of those already on the list, are there any changes we should be aware of? If so please hit the email address (found bottom of page on the right) and let us know so we can update the W7DK Radio Club of Tacoma "Elmer Board".

NEW HAMS OR MEMBERS: If you are looking for help, and NEED AN ELMER to help guide your way, use this table! Find the skill you need on the left, then look for an Elmer Provider of that skill on the right and reach out to them. ALL of these Elmer's have committed to helping so please don't hesitate.

Elmer Board

Do you need help with some area in ham radio?

List of members' areas of interest.

1. Technical questions, Classes
2. Help with Code
3. License Examinations
4. Antenna and Station planning
5. Antenna and Tower erection
6. Buying new or used equipment
7. Equipment repair
8. Understanding and operating your equipment
9. DX and Contests
10. Club and ARRL activities
11. Using test equipment
12. IRLP, Digital, SDR, ARPS, Winlink, Vara, Satellite
13. Understanding How Electronic Circuits Work

Name/Call Sign /Phone Number/ Topic

Adam W2NCC 360-870-7894 (4,5,6,7,11)
 Dave N7HT 253-363-1692 (1,2,4,6,8)
 Steve AF7YD 253-988-087(1,2,7,10,11,13)
 Dave W7UUU 253-820-0890 (2,4,6,9)
 Al N7OMS 253-495-9068 (10,12)
 Mike W7XTZ 253-405-8095 (6,8,10)
 Stephen AD7AB 253-212-9437 (1,3,4,12)
 Randy WB4SPB 253-761-9391 (2)
 Phil K7PIA 253-307-4781 (9,10,12)



HOMEBREW & KITS CORNER

Radio homebrew projects both large & small



Homebrew XMTR, keyer, and paddle

Photo by W7UUU

FOLLOWING ON A THEME from last month's *Bark*, I decided to profile a homebrew transmitter I built myself a while back. It's very easy to duplicate (all things considered) and the parts are all still quite obtainable, even the power transformer ([Hammond 269EX](#)). Most other parts are easy finds at ham fests.

The design is a classic by Don Mix **W1TS** and has been documented over the years on many websites and ham radio blogs. It's CW-mode only, of course, with a maximum input power of 10-12 watts (resulting in an output of 4-5 watts).

The oscillator tube is a 6C4, feeding the 5763 ampli-

fier tube. It's designed to operate using traditional [FT-243](#) style vintage transmitter crystals. But try as I might, I've never been able to make it happy with a VFO ([variable frequency oscillator](#)) so have left it crystal-controlled which works fine for me.

As mentioned, most of the parts are pretty generic and even today can be found pretty easily. The tank coil (seen in the photo lower left, in the center of the chassis) was one from my junk box that came originally from some old multi-band transmitter—probably a Heathkit of one flavor or another. Since this transmitter only operates on the 80 and 40 meter bands, only a part of the coil is used for operation.

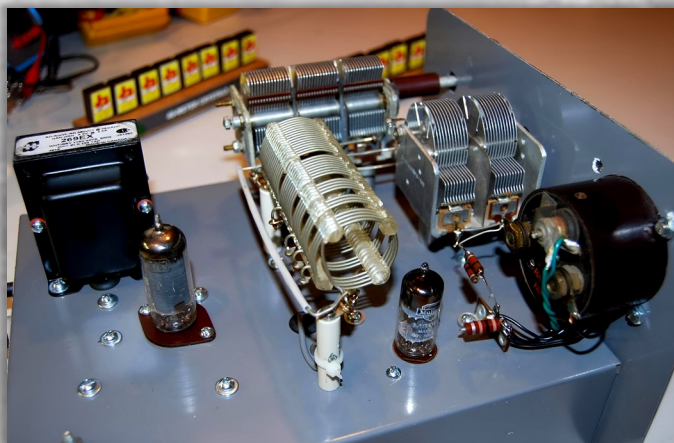
The meter is also a junk box find—from an old E.F. Johnson transmitter, just for the cool look of it.

The outside cabinet is actually from a scrapped [Heathkit SB-600 speaker](#) that had a broken speaker panel board, and the paint was flaking off. I stripped it to bare metal and refinished using a green Krylon paint that roughly matches "Heathkit green".

The front panel artwork is very simply created using the same software I use for *The Bark*: Microsoft Publisher. I laid out the front panel parts on a piece of paper and mapped them out in appropriate locations, then created the art in the software to match.

I then drilled all the required holes using my drill press (with a large metal-capable circle-bit for the Johnson meter).

After many trial-and-error printouts on plain paper, once I had it all dialed in, I had it printed at Office



HOME BREW & KITS CORNER

Radio homebrew projects both large & small



Depot on 12-pt. semi-gloss cover stock, which was then affixed using Scotch-77 spray adhesive, after which the panel holes were cut out, the front panel controls were mounted, and the project was completed. It performs quite nicely in every way.

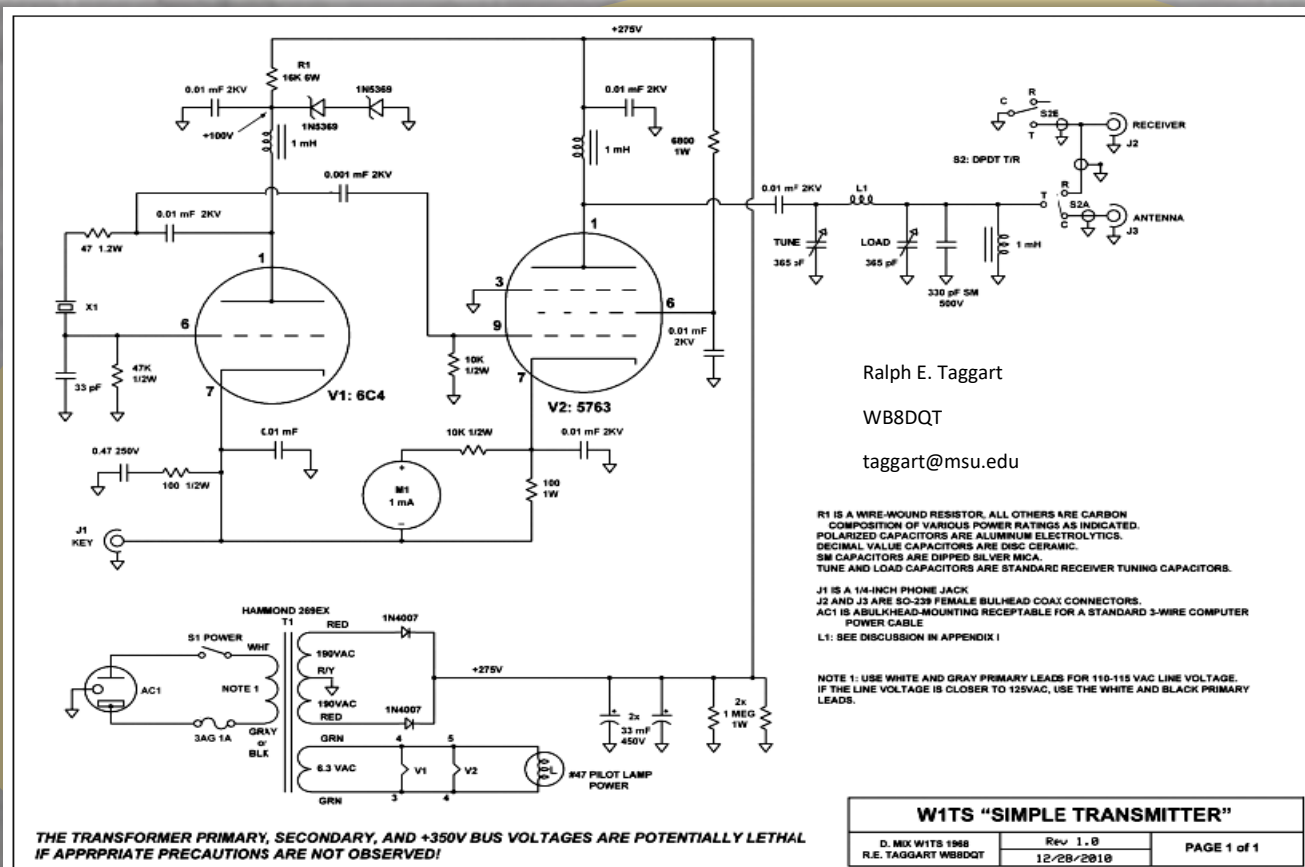
Using receivers such as a Drake 2B, Drake R4B, and Collins 75A-4, this little 5-watt CW-puffer has made quite a few contacts in my station and is a lot of fun to use. Oh, and the model? HBT-2T means “Homebrew Transmitter, Two Tubes” in case you’re wondering. If you’d like to build your own, here is a link to one of the many articles describing it: [\[LINK\]](#)

-Dave W7UUU



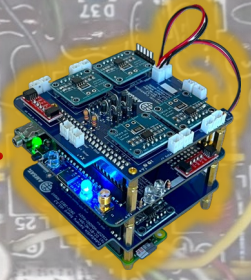
Above: The HBT-2T on the bench ready to put in cabinet

Below: The W1TS schematic ad documented by WB8DQT



HOME BREW & KITS CORNER

BUILD YOUR OWN CUBESAT SIMULATOR AT HOME!



WHILE RESEARCHING AN UNRELATED ARTICLE, I came across this super-cool project from the folks at AMSAT. While not entirely new in concept, the CubeSat Simulator has just recently been announced as a *complete kit*. The announcement came at the recent Hamvention by [Villanova University](#) engineering professor, Alan Johnston, [KU2Y](#). Alan currently is VP of Educational Relations with AMSAT, as well as the faculty advisor of the Villanova University [Amateur Radio Club](#) ([W3YP](#)) and the university's [CubeSat club](#).

So... what is a CubeSat Simulator? It's an educational tool designed by the engineers at [AMSAT \(the Amateur Radio Satellite Corporation\)](#) to simulate the basic functions of an *actual* [1U CubeSat](#), which is a small satellite used for space research. It allows hams and satellite-curious hobbyists to learn about how real satellites work.

The simulator kit involves building up the hardware, including several circuit boards for power management, control, battery management, and a 70cm FM Transceiver Module run by a Raspberry [Pi Zero WH](#). The frame parts are made with a 3D printer.

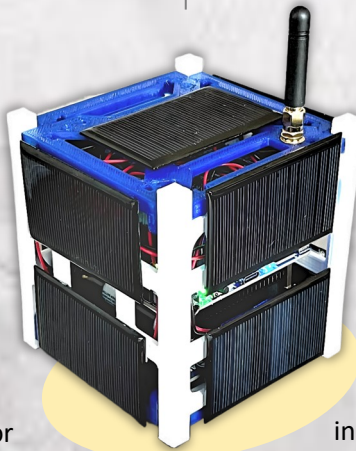
Using software, simulations can be done by the user to replicate many of the aspects of a real satellite, including telemetry, power management, and communications via the 70cm (440 MHz ham band) transceiver that's onboard.

At [Hamvention](#), a full kit was announced (with limited availability) including everything needed to build the simulator: All required PC boards, and the [Raspberry Pi Zero WH](#) with a fully-programmed micro-SD card. Also included is a Pi camera, 10 solar panels, two SMA cables and antennas, sensors for pressure, temperature, altitude, and humidity, and everything else needed to build the kit right down to the 3D printed frame case.

There is only minimal soldering work required to build this CubeSat simulator, I'm told.

It's quite the kit and I'm sure a ton of fun to build and experiment with. The initial pricing was \$400 including shipping to any US buyer (no overseas sales). Alas, they sold out fast.... very much a home-run product!

Says Alan, "The kits were sold out in June but they will be available again in October or November". Alan will let me know when these are back in stock, and I'll make sure to let club members who may be interested know. You can *right now* buy the blank PC board sets, and just source all of your own parts and 3D-print your own frame. You can read all about this open-source project at <https://CubeSatSim.org/wiki>. You do *not* need to be a member of AMSAT to buy a CubeSatSim. While not an actual spacecraft sort of satellite, the CubeSatSim can actually be modified (using instructions from AMSAT) to fly as a high-altitude balloon payload. But note that this would be for very advanced users—not beginners!



Completed CubeSat
Simulator

Thanks to Alan [KU2Y](#) for providing input and commentary for this article. He's open for direct questions via email: KU2Y@ARRL.net -Dave [W7UUU](#)



AMSAT CubeSatSim kit as shown at Hamvention
Photos ©2024 AMSAT Corp.



W7OS DOC SPIKE MUSEUM

Featured Gear from the Museum

Dave W7UUU



MOST VISITORS TO THE W7OS DOC SPIKE MUSEUM

will likely never have noticed a small, green, boxy radio at the top of one of the bookcases in the Oakman Library section, center of the upper floor. The radio is a Westinghouse Electric model CRI-43007 VHF transceiver, also referred to as the TBY, built under contract for the Navy Department Bureau of Ships, and used in the field by both Navy as well as USMC. Other manufacturers were granted contracts to build the TBY / CRI-43007, including Colonial. The design dates to the late 1930s but was improved through several revisions in the 1940s, largely for use in the Pacific Ocean (Empire of Japan) theater of World War II.

It's a unique piece of radio history in that the TBY was in fact a "transmitter—receiver" and not a transceiver as most hams might consider it to be. The key difference is there are two separate VFOs—one for the transmitter and one for the receiver. There's a fun tie-in to ham radio gear in that the very popular Heathkit HW-16 "transceiver" was in fact the same sort of design, with a separate receiver VFO and transmitter frequency control (either crystals or external VFO). In such designs, only the power supply is shared across both systems.

The CRI-43007 was a VHF rig, covering from 30 to 300 MHz although some contract variations supported different ranges (28 to 90 was very common) but still in the high-HF and VHF bands. It's primary use was "ship to ship" communications in [PT Boat Squadrons](#), often as a backup to TCS sets., where the distances were usually

line-of-sight and not more than a mile, since the output power was a mere 10 to 15 watts, and the antenna on the TBY was just the one built onto standoffs on the side of the radio. (Our example, seen here, is missing the external collapsible antenna).

The receiver was a single-conversion superheterodyne with a regenerative detector, so there is in fact a "regen" control knob in the extreme lower right of the front pane. This leads some to think it's a "regen" receiver but it's not. In those years it was common to use a regenerative detector stage to improve receiver gain without adding complications of additional stages.

The transmitter operated on both CW and AM voice

(CW was not likely used very often, based

on many sources I read while researching this radio). With the low power, limited antenna, and a so-so receiver, transmit range would have been at most a few thousand yards or so on land, and at sea up to maybe 10 miles.

Modulation was via a "modulated oscillator" so as a result there was a significant FM content as well. It was simply too small and too light to have employed even screen modulation

much less plate modulation as most high-power fixed AM transmitters used at the time.

Frequency tuning must have been a bear in the field, given the transmitter and receiver frequencies are fully independent, and fully analog (not crystal controlled, so no "channels" - only tuning dials, and hard to read at night... there is no backlighting). In an effort to help "channelize" operation, affixed to the top of the radio were charts to convert standard crystal channel

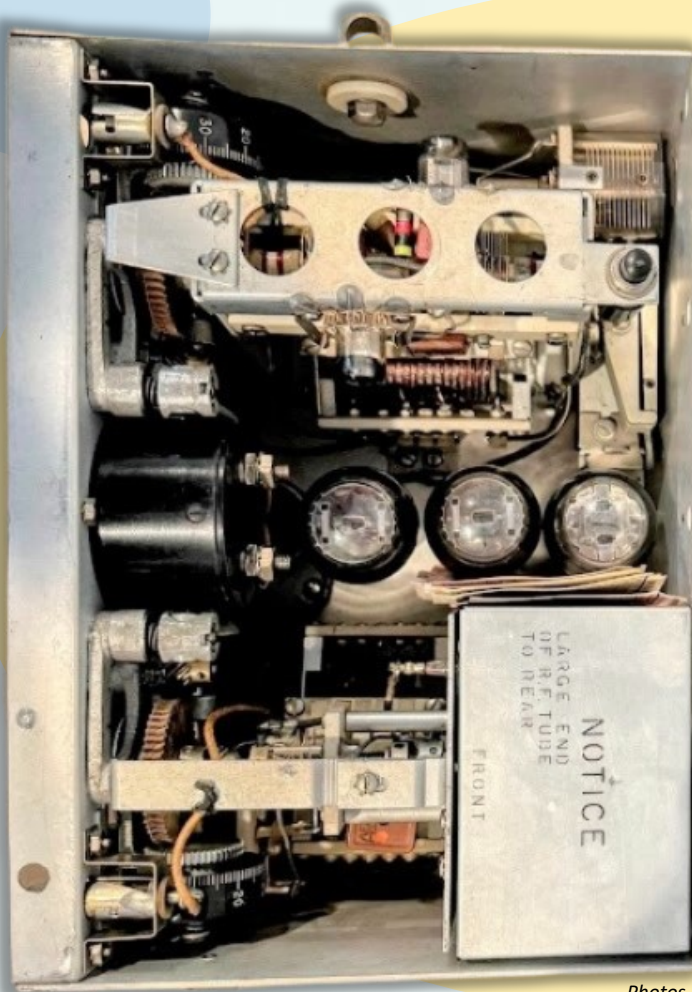
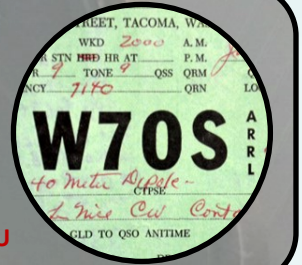


Photo by W7UUU

W70S DOC SPIKE MUSEUM

Featured Gear from the Museum

Dave W7UUU



Chan. No.	Ant. Sec.	Transmitter Dial	Chan. No.	Ant. Sec.	Transmitter Dial	Chan. No.	Ant. Sec.	Transmitter Dial	Chan. No.	Ant. Sec.	Transmitter Dial
50	6	333	62	6	590	73	6	786	85	6	959
51	6	358	63	6	610	74	6	802	86	6	972
52	6	381	64	6	629	75	6	818	87	6	985
53	6	404	65	6	648	76	6	833	88	6	999
54	6	426	66	6	666	77	6	847	89	6	1012
55	6	447	67	6	684	78	6	861	90	6	1025
56	6	468	68	6	702	79	6	875	91	6	1038
57	6	488	69	6	720	80	6	889	92	6	1051
58	6	509	70	6	737	81	6	902	93	6	1063
59	6	530	71	6	754	82	6	917	94	6	1076
60	6	550	72	6	770	83	6	931			
61	6	570				84	6	945			

Channel to "Dial Setting" conversion chart—also has antenna settings



Photos by W7UUU

CRI-43007 with the lid opened. Note the spare tube storage. There were two spare 955 (or 954) acorn tubes for the oscillator and receiver front-end RF amplifier with 12A6 beam power tubes used for the finals. Inset photo:: USMC Navaho Code Talkers with TBY

frequencies to dial settings, but still very crude in design and very touchy to implement in the field (see photo).

During World War II, the TBY CRI-43007 radios (among a number of other more powerful and longer-distance rigs) were used by the famed Navaho Code Talkers where short range and extreme portability were needed. Be watching in the coming months for a Logger's Bark full-feature article on the Code Talkers, something many ham radio operators may never have heard about. It's really cool that our club holds in its museum one of the very

radios that could have been used by a Code Talker (there's no way to ever know for certain one way or another). If you ever want to see this radio in person, head upstairs and take an immediate left into the library stacks, and you'll see it sitting on top of the bookcase on the north side. It's a wonderful piece of radio history we are fortunate enough to own.

Until next month, 73 -Dave W7UUU

MIGHTY DK! QSO REPORT

Reporting all the HF QSO action from the club



W7DK

EACH MONTH in the Bark, the Radio Club of Tacoma recognizes the members and guests who have made non-contest QSOs using the HF stations at our clubhouse. [Saturday Open House](#), especially, is a time when members have access to this equipment. Why not sit down at one of our operating desks and make a contact or two? Assistance is almost always available for those unfamiliar with the equipment, and if your license class doesn't permit HF operation, ask the denizens of the HF Room or the Saturday clubhouse host to help you find a suitably-licensed control operator to sit with you. We'd love to have you join in!

Come join us and get in the log! ■ -editor

NAME	CALL	QSOs
Mike	W7MKE	75
Mike	W7XH	69
David	AC7KP	15
Charles	AE7PC	11
Randy	KK7RHR	7
Gary	WG7X	6
Dave	W7GEL	4
Eman	KK7QLW	3
Nate	KK7QND	2

Clubhouse QSOs during this period



Above: HF Room Flex 6600 & Mercury III

Below: HF Room Icom IC-7610 & KPA-500



Photos this page provided by

Dave **W7UUU**

W7DK LOGGER'S CERTIFICATE

Classic “first award” for Members



HAVE YOU APPLIED for your own W7DK Logger's Certificate?! It's FREE and it's EASY! All you have to do is work at least 10 members of the Radio Club of Tacoma, then send in your list of call signs worked, and BAM! We'll print out your certificate and get it to you toot sweet by US Mail.

There are no confirmations required—no logs to submit—and really no rules other than the call signs you submit must be members of the club. You may work them on HF, 2m FM, on FT8 or



SSB or any other mode! In fact, one of the best ways to get your 10 contacts is to check into the weekly Tuesday Night Net on the 147.28 club repeater... every Tuesday at 7:30 PM.

This venerable award was first launched in 1957, using certificate paper printed by club member Dick Ryan, **W7RGD** using a donated printing setup.

As of the date of this publication, there have been almost 700 certificates issued, including a few reissues over the years to replace lost certificates.

The original certificates were hand-lettered by long-time RCT member Barbara Osborne, **W7UYL** (SK 2022), and all of the records were kept in a series of recipe boxes still held by the club.

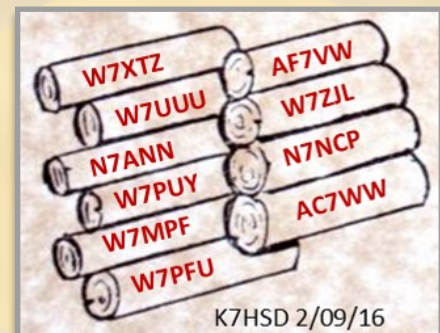
We still have a huge stash of this beautiful OFFICIAL logger's Certificate paper.... So if you do not already have yours, just shoot us an email with your list of call signs worked, and put “Logger's Certificate” in the subject line...

Send to loggersbark@gmail.com



Barbara Osborne **W7UYL** ca. 1955 at an RCT USO event

We also issue “Log Piles” for endorsements of each group of ten additional stations worked! So don't hesitate—get your Logger's Certificate or Log pile Endorsement *today!*



Wanna get yours? Send in those contacts!

THE MYSTERY MEMBER!



Can You Identify This Mystery Member?

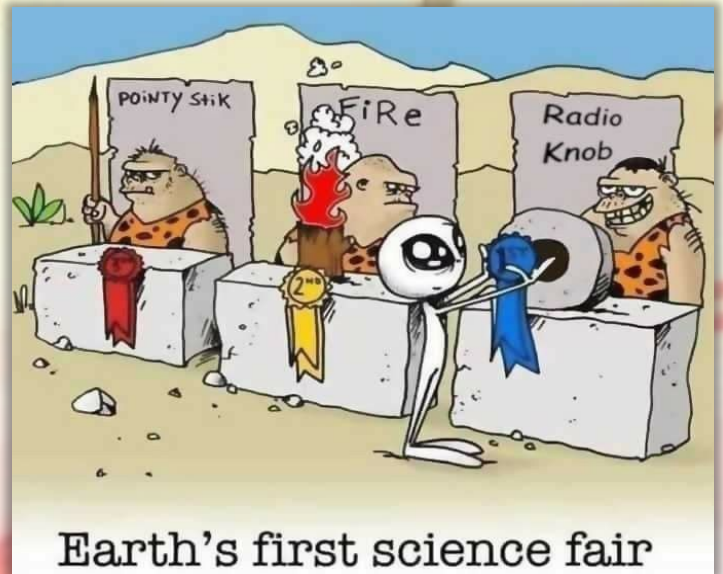
If you think you know
who our Mystery
Member is, just send
an email with your
guess... first correct
responder will win a

**FREE QRZ
Bumper Sticker!**

Mailed right to your
door!



Wanna be featured?
Send In your photo!



Got a ham radio funny? Send it in!!



HOW'S DX?

DXpeditions and Notable DX operations



WEB

NEW

NG3K Upcoming DXpedition Calendar

-Courtesy Bill Feidt, **NG3K**—used with permission

September		NG3K	NG3K	NG3K	NG3K	NG3K
2024 Sep01	2024 Sep08	South Cook Is	E51WLG	LoTW	DXW.Net 20240720	By N2WLG fm Rarotonga I (IOTA OC-013); 40-10m; CW + digital; QSL via N2WLG (B/d)
2024 Sep02	2024 Sep16	American Samoa	KH8T	M0URX	TDDX 20240530	By N5DD W5MJ K5PI VE7KW; 80-10m, perhaps 160 and 6m; CW SSB FT8; 2 stations
2024 Sep03	2024 Sep13	Zimbabwe	Z22AO	HA5AO OQRS	DXW.Net 20240304	By HA5AO fm Zambezi National Park (KH21ww); 80-6m; CW SSB FT8
2024 Sep05	2024 Sep09	Monaco	3A	EB7DX	DXW.Net 20240418	By MM0NDX as 3A/MM0NDX and MM0SAJ as 3A/MM0SAJ; focus on low bands + 6m; SSB RTTY FT8
2024 Sep05	2024 Sep15	Pitcairn	VP6WR	LoTW	DXW.Net 20240123	By G0VDE; 80-10m; SSB FT8, perhaps CW; QSL via M0URX OQRS
2024 Sep09	2024 Sep30	Somalia	600T	LoTW	DXW.Net 20230910	By team; focus on low bands + 6m; SSB CW + digital
2024 Sep10	2024 Sep17	St Kitts & Nevis	V4	LoTW	DXW.Net 20240803	By WE9G as V4/WE9G fm Frigate Bay (FK87pg); HF; mainly digital; QSL via Club Log OQRS
2024 Sep10	2024 Sep20	Madagascar	5R8SR	Club Log OQRS	TDDX 20240711	By M0KRI fm Nosy Faly (IOTA AF-057); 80-10m; CW FT8 SSB; 100w; vertical; dates tentative
2024 Sep12	2024 Sep19	Palau	T8	JO3LVG Buro	OPDX 20240612	By JM1LIG as T88FM, JR3QFB as T88JH, JO3VLG as T88MK; 160-6m; SSB FT8
2024 Sep14	2024 Sep23	Zambia	9J2AO	HA5AO OQRS	DXW.Net 20240304	By HA5AO fm nr Victoria Falls (KH22wc); 80-6m; CW SSB FT8
2024 Sep17	2024 Sep21	French Polynesia	FO	TBA	DXW.Net 20240123	By G0VDE as FO/G0VDE; 80-10m; SSB FT8, perhaps CW
2024 Sep18	2024 Oct01	St Kitts & Nevis	V47JA	LoTW	W5JON 20240626	By W5JON fm Calypso Bay; 160-6m; SSB FT8; yagi, verticals; QSL also OK via W5JON direct
2024 Sep18	2024 Oct06	Tanzania	5H1WX	I8KHC	DXW.Net 20240621	By OK2WX fm Mafia I (IOTA AF-054); 80-10m; CW SSB + digital
2024 Sep24	2024 Oct04	Botswana	A25AO	HA5AO OQRS	DXW.Net 20240304	By HA5AO fm Chobe National Park (KH22ox); 80-6m; CW SSB FT8
2024 Sep28	2024 Oct07	Reunion	TO2DX NEW	OM2DX	DXW.Net 20240813	By OM2DX; HF; CW + digital; EFHWs; QRV for CQWW DX RTTY Contest

Click anywhere on the table above to visit Bill's site directly—the hyperlinks will be active there.

STRAY TOPICS OF INTEREST:

Fun Stuff for Hams to Read!



W7UUU



What are your current actively-in-use tube gear preferences? Choose ALL that apply:

Edit

* I have at least one tube transmitter or transceiver that I use (includes hybrids)	<div><div></div></div>	41 vote(s)	50.0%
* I have at least one tube receiver that I use	<div><div></div></div>	23 vote(s)	28.0%
I ONLY use tube ham gear in my primary station (not counting modern HTs, mobiles, etc.)	<div><div></div></div>	4 vote(s)	4.9%
I used to own and use tube gear but it's all sold and I won't be getting more	<div><div></div></div>	15 vote(s)	18.3%
I actively use tube gear (transmitters, receivers, test gear, etc.) that I built myself	<div><div></div></div>	12 vote(s)	14.6%
I only use tube gear on my test bench - not for my main station	<div><div></div></div>	0 vote(s)	0.0%
I have never owned tube gear but might try it someday	<div><div></div></div>	6 vote(s)	7.3%
I have never owned tube gear and will never own tube gear	<div><div></div></div>	7 vote(s)	8.5%
* I build or buy small 1-3 tube QRP homebrew tube transmitters or regen receivers, keyers, etc.	<div><div></div></div>	8 vote(s)	9.8%
None of these answers fits my situation - read my comments below	<div><div></div></div>	5 vote(s)	6.1%

THIS IS AN INTERESTING POLL from QRZ.com asking users to comment on the types of tube gear that might still be present in their shacks and in regular use in various capacities. It's interesting that fully 50% of respondents have at least one tube rig. I find this interesting... is it simply an indication of the aging of the amateur radio community? Probably so... but it's also possible that newer hams, thoroughly of the modern "high-tech ham gear era" are possibly considering tube gear—whether for nostalgia, or for just wanting to know what all that old "tube gear" was all about. My own votes in the poll are those that are indicated in **bold type**. ■ -editor



WELCOME TO THIS NEW COLUMN in *The Bark*! I created this section to address those who feel that amateur radio is only for the well-heeled, and that those on a tighter budget can't play. Or those without much land for antennas. In addition, this column will attempt to address the new Technician Class operators who feel that 2m FM and repeaters on a \$25 Baofeng is the beginning and the end of their ham radio careers.... that they will never have enough money to spend on the hobby to get their feet wet in HF.

To start the column off, I chose to document an object lesson I've used for years with new techs thinking these thoughts, using gear I have on hand. Over a number of years, I used the setup I'll describe herein to help new hams realize they can get on HF SSB without breaking the bank.

This month's "column challenge" is to fire up a 1990s [Radio Shack HTX-100 transceiver](#) (10-meter transceiver offering 25 watts on SSB and CW), paired with a super-simple and basic 10-meter dipole. I will build the dipole as part of this challenge, giving basic details on dimensions (it's not really a "step by step" article—just basic instructions).

THE RADIO: I already own an HTX-100 that I have used for several years for fun in the various 10m SSB contests. But they

are very readily available. Radio Shack sold bazillions of them over some 25 years, and they regularly turn up for a typical price of \$100 (often including shipping for that price). There are *three* of them on eBay at this moment, all in that general price range.

THE ANTENNA: For this project, I wanted a super cheap homemade antenna, using just stuff I had on hand or could easily and cheaply find at a ham fest. Knowing this project was coming, I found a decent center insulator with an SO-239 connector at the Chehalis Ham Fest recently. It was \$2 on one of the tables. No balun—nothing fancy—just a plastic center piece for a dipole. The antenna wire I had on hand in the shop. The RG-8X coax was already on hand, feeding from inside the shack out to an old 2m ground plane antenna I abandoned.

Using the tried-and-true formula for a dipole, $468/f$ where " f " is the desired center frequency in megahertz, I found the overall length needed to be right about 16 feet 5 inches. I cut the wire to be about 8 inches longer than that to allow for attaching to the insulators (another junk-box item). It's always good to be a bit long on a dipole—you can then easily shorten it to dial in a low SWR—but making it longer is a challenge!

I hung the antenna about 15 feet high, with a slight slope



Radio Shack "Realistic" HTX-100 transceiver as installed in the W7UUU shack for 10m SSB and CW. Typically \$100 used



down to 12 feet just using step ladders and tossing a rope over a limb. No "potato launchers" - I want to keep it as inexpensive and easy as possible. The photo above shows the antenna as I installed it just this afternoon, a few feet above the roof.



SWR METER: While you can take your chances that your math, measurement, and cutting skills are spot on—you really need to use an SWR meter to check your work. Fortunately, there are very inexpensive meters out there, either from Amazon or



from a ham fest. For this project, I will use an [Astatic PDC2 100w SWR/wattmeter](#) that I just picked up at a regional ham fest for \$10 in very good condition. But even brand new, they can be had on [Amazon for \\$26.62](#) with free shipping (for Prime members, slightly more if not). Or, simply borrow one from a local ham you might know through your club. Even an old CB SWR meter will work just fine (in fact, those were often optimized for frequencies not far from the 10m ham band!).

You won't need a tuner! The “watering hole” for 10m SSB is from 28.400 to 28.500. If you cut the antenna for a center of 28.400 (the “calling frequency”) you'll be right where you need to be (assuming you trim as needed when using your cheap SWR meter). Moving up the band 20-50 KHz won't be a big deal and you simply won't need a tuner—that's one expense you can easily avoid at this stage of your ham career.

After a few minor trims of my dipole, I had a nearly perfect 1:1 SWR at 28.400, the 10m calling frequency.

HOOK IT ALL UP: Hookup was a breeze—I just had to add a length of coax to the old 2m antenna cable so I could pull it up into the air. Inside the shack, the SWR meter was inserted inline. To measure the SWR, I had to use a cable with 1/8” plug to simulate a Morse key to momentarily key the transmitter in CW mode to check the SWR. After a few trims, the SWR reading from the Astatic meter was essentially 1:1 or extremely close to it. Trimming a short dipole like this is very

easy to do, compared to lower-band HF antennas.

GETTING ON THE AIR: Full disclosure? Let's just say, the sun is not a happy camper right now! Did you happen to notice the graphic in the [Secretary's column](#) from today?! Despite a very high sunspot count, the solar storms seem to daily wipe out the “good with the bad”. That's been the trend of late... the sun has some agenda going on that isn't clear. The bottom line: the bands are DEAD these days. However, with this set-up, I have been easily able to check into a couple of local nets with great reports, and from a few dozen CQ calls, worked states including California, Arizona, and Iowa. Had there been a 10m contest during this test period, there would have been lots of “big guns” to work. But for many years, I have used an HTX-100 into a basic dipole identical to this. I will keep trying daily, and should conditions improve, I'll amend this whole paragraph and you'll not even see it! But for now, we can all only do so much—even a linear and Yagi can't make propagation work if there is no propagation to be had in the first place.

CONCLUSION: The whole point of this article is to answer the question: “Can someone with a very limited budget, with nothing more than a Technician (USA) license, and with just limited space for an antenna, still get on the air on SSB and make contacts?”. And the answer, in my mind and in my many years of experience, is a resounding YES! Sure—the Radio Shack HTX-100 is a very old and limited radio. But it can still help get a new ham on the air on 10m SSB. And of course, there are many “budget-minded” HF rigs in the used radio market: the Icom IC-718 covers all the big HF bands and often sells for \$400. There are lots of older rigs from the past—Kenwood TS-440 for example, that are 100% solid-state and very capable.

Is ham radio an expensive hobby? It doesn't have to be! But like so many technical hobbies (model trains, RC cars or airplanes, drones, etc.) it can be equally or even more expensive to start out with. There's no reason to rule amateur radio out simply due to “high cost of entry”.

-Dave W7UUU

STRAY TOPICS OF INTEREST:

The Myth and Reality of Power



W7UUU

WHEN MA into the world of HF operation start to think about buying an amplifier for their 100 watt transceiver in hopes of “competing with the big guns”. But in real terms, just how much difference does an amplifier actually make?

This can be a multi-layered scenario to analyze: there are significant differences when looking at a small QRP station going from 5 watts to 500 watts vs. a 100 watt station or a 500 watt station going full legal limit at 1500. This is due to the nature of decibels (dB). They are a relative unit of measurement that express the ratio of two values on a logarithmic scale.

To keep things simple: for the purpose of this article, let’s keep our terms and definitions simple without a ton of math (which I’m not all that good at anyway!). A dB is a unit that is used to represent the relative power of a signal—a signal such as sound from a stereo or, in our case RF power. Very simply: a dB is a term that *represents two quantities as a ratio to each other*.

Using sound as an easy-to-understand example (and similar in concept to RF), take any given sound and then amplify it to be 2 dB louder. This would only be *barely* perceptible by most people. At 5 dB the difference would be easily heard by the listener, and when upped to a 10 dB level, to the listener’s ears would be perceived it as *double*, or twice as loud. And of course the reverse of all that is true as well—lower a sound volume by 10 dB and it’s now “half as loud” to the listener.

So now let’s bring this to RF and ham radio. A 1000 watt amplifier, connected to a 100 watt transceiver (remember—a dB is a ratio of two values) would be a *doubling* of “perceived power” - not a ten-fold increase as the numbers might suggest to some. Just a doubling.

Next, let’s define the value of an “S-unit” (not the RST

value your ears might assign, but the measured value in microvolts on a modern receiver). One S-unit is considered to be 6 dB. And let’s say your 100 watt transceiver is getting you reports that put you at S4 all the time and you want to be louder on the other end of a QSO. You spot an older 200 watt transceiver in the QRZ Swapmeet and think “That’s the ticket!” and whip out your credit card.

But how much stronger will you be going from 100 watts to 200? Will you go from S4 to S8 because you’ve “doubled your power”? No! Not even close. The ratio of those two values, expressed as dB, represents 3 dB, which is only one half an S-Unit! That extra 100 watts will just get you to S-4.5 from the S-4.0 (when running 100 watts) on the other guy’s meter... this increase is *not even noticeable*!

So now let’s say you decide on one of those MFJ 500 watt mobile solid-state amps that can be had for pretty cheap. Well, it’s better now... just shy of 7 dB change in that ratio. That’s one S-unit! Now you’re at S-5.



Ameritron ALS-500 500-watt amplifier

Lastly for this exercise, let’s say you find a great deal on a full US Legal Limit (1500w) amp. Your 100 watt transceiver with that amp will net you a whopping 10 dB but not even reach a full 2 S-units higher on the other end!

STRAY TOPICS OF INTEREST:

The Myth and Reality of Power



W7UUU

Taking it to the absurd, let's use the ratio example of 100 watts driving one of those "illegal CB" amps that run 5000 watts that we've all heard about. That's just shy of 17 dB which is not even 3 S-units! So you'd risk FCC pen-



Elecraft KPA-1500 US legal-limit amplifier

alties, a whole lot of money spent on the amp and a big hit on your power bill, just to go from S-4 to S-7.

But surely the "mathematics of logarithmic ratios" behind [Mr. Alexander Graham Bell's](#) dB has some *good* applications in amateur radio, right? Yes! Lots of them. Let's now take the case of hams running QRP (universally accepted to mean 5 watts CW, or 10 watts PEP). What happens when a QRP operator uses an amplifier?

5 watts amplified to 100 watts (like when using the popular [Xiegu Xpa125B amplifier](#))

is not bad—12 dB increase or two S-units. Not terrible! Or even better, running your 5 watts of QRP fury into an amplifier with sufficient gain to produce 500 watts results in 20 dB of gain—more than 3 S-units greater.

But still—amplifiers are expensive, and while they do certainly make a difference,

the "money shot" in ham radio really is antennas. Even a simple inexpensive Hexbeam delivers about 6 dB (one S-unit) gain over a dipole—and if you factor in combined forward gain and reverse attenuation of unwanted signals, it's closer to 20 dB realized, about 3.5 S-units... for pretty cheap!

Antennas are now and always have been the least expensive way to get those logarithmic ratios to work in your favor. And better antennas not only help your transmitted signal, unlike amplifiers *they also greatly improve your received signal*.

Here's an on-air anecdote that I wish I had recorded. I was working a station in a 10-meter contest with an old converted CB rig as a semi-homebrew 10m rig. I replied to the CQ of a station in Washington, DC (I'm in Burley, WA in the Seattle area). I had added "QRP" after my call so he picked me in the pileup.

He asked how much power I was running and I told him 3.5 watts—he was blown away! He was running legal limit (1500W). I gave him a report of "well over S-9". He said, "OK let me switch to barefoot". He dropped to 100 watts and I reported, "you are now an S-8 to S-9". He

then dropped to 5 watts and I responded, "you're easily S-6 to S-7. You could run the contest at that level and do fine!" to which he replied, "Well I just put it back up to 1500, just to be safe". 🤔

That was a true-life illustration of "the myth and reality of power". The math just doesn't lie! **HOWEVER....**



W7UUU's semi-homebrew EF Johnson CB conversion to 10 meters, producing 3.5 watts output SSB

(Continued on page 49)

STRAY TOPICS OF INTEREST:

The Myth and Reality of Power



W7UUU

...THE PRIOR THRUST of this article was intended to dispel some of the oft-held myths of adding an amplifier, with the conclusion that gain antennas are a far more cost-effective way to achieve strong signals around the world.

But the reality is, many hams don't have that option! And that segment of amateur radio operators is a big part of what the amplifier market is aiming for... those who want to somehow have a "bigger signal" that simply have no option for better outdoor antennas. Whether due to landscape issues or having to deal with an HOA, there are indeed lots of times where an amplifier might just be the only way to get a "bigger signal".

Another aspect is the cumulative effect of noise to all the other hams in similar situations to which the subject operator might want a contact—they could easily have S-8 noise levels from all the myriad of "noisy power supplies" out there (grow lights, solar chargers, TV screens, you name it). The calling station might well get through better by having a bit of power on his end, and still be able to have QSOs with a friend suffering from high noise, poor antennas, or all of the above.

So in the end—only YOU can decide if adding an amplifier is a "myth or reality" for your particular situation. In the US, it's perfectly legal to run up to 1500 watts (much lower in some other countries).

There are lots of reasons to make this choice. I hope you enjoyed reading some of the reasoning behind what amplifiers and gain-antennas are all about, in terms of the dB science of it—in a simplified way. That was the goal.

-Dave W7UUU

Super-brief history of ham radio amps

LINEAR APLIFIERS, while around fairly early in ham radio, really began gaining prominence in the 1950s. Initially, many amateur radio operators built their amplifiers, which of course were tube-based, often adapting designs from military amps of the time. These homemade amplifiers were a testament to the technical skills and ingenuity of the operators (which is still the case today for hams who build their own amps!).

The first commercially available linear amplifiers for amateur radio appeared in the late 1950s. Collins Radio Company was an early pioneer in this field, releasing the 30S-1 linear amplifier in 1959. This amp quickly gained a reputation for reliability and high performance, setting an early benchmark (as Collins often did back then).

Around the same time, Heathkit introduced its first linear amplifiers, the KL-1 "Chippewa" and the HA-10 "Warrior." The KL-1, released in 1959, was one of Heathkit's earliest forays into high-power amplification, providing 1,500 watts input on AM and 2,000 watts on SSB. The HA-10, introduced shortly thereafter, offered a more affordable and slightly lower-powered option but still provided significant amplification for amateur operators.

In the early 1960s, Heathkit continued to make linear amplifiers more accessible to hams with the SB-200 and SB-220 kits. These amplifiers allowed operators to build high-quality units at home, making powerful transmission capabilities available to a broader audience.

So while early linear amplifiers were often homemade, the late 1950s and early 1960s marked the start of commercial offerings, with Collins and Heathkit really leading the way.

These days, solid-state amps are quickly taking over the market and one day soon, tube amps will likely truly be a "thing of the past".

-Dave W7UUU





SOMETHING WASHINGTON STATE HAMS interested in POTA activities need to be aware of is the “Discover Pass” which is required for vehicle entry into all state parks. Despite the high taxes we all endure here, this is yet another added tax put in place back in the 1990s to add more cash to the coffers for what we all thought was already being paid for—public parks!

It’s essentially a parking permit. Virtually all parks in Washington now have a kiosk right near the entry for purchasing the Discover Pass. Many, but not all, can take credit cards. Quite a few still only accept cash placed in an envelope at the self-pay station.

Currently, the cost is \$10 (\$11.50 online purchase) for a day pass which is not limited to the park where purchased. It’s good for the day, so if you plan to activate several parks that day just plan your routing and you can maximize the value of your day pass.

But if POTA activations are more than just a passing curiosity, the far-greater value is the \$30 (\$35 online purchase) annual pass. Not only does it grant a full year of access to all parks, you can register two vehicles. You just need to remember to transfer the pass from one car to the other before heading out! (You can figure out just why I remind you of this!)

Note that this pass is *only* good for the day-use areas and does not apply to campground areas of the parks. Those areas have their own fees for overnight use.

However, if your budget is tight or you just don’t want to feed more money into the state’s bottomless money pit, there are actually 12 days each year that are free for all, with no pass required! For the remainder of this year, those include:

- September 28th for National Public Lands Day
- October 10th for World Mental Health Day
- November 11th for Veteran’s Day
- November 29th for Autumn Day

Click the image to view the entire list of free days.

The parks are patrolled regularly, and if you fail to display a pass, the penalty fine is \$99 and is registered with the courts just like a traffic citation. If you provide proof of purchasing a

Discover Pass within 15 days of the infraction, the court will lower the penalty fine to \$59. So—buy the pass in the first place, and don’t forget to display it!

There are some very cool work-arounds that make it so you don’t require a pass at all! If you enter the park by a non-motorized means, no pass is needed! So if you have a friend drop you off and come back later to pick you up, or if you leave your car outside the park and walk in, same thing—no pass required. This also applies to boats, provided there aren’t other fees involved. Some marine parks require moorage fees to be paid. Be sure to check before heading across the bay to your favorite island park. And if you just want to scope a park out and see where you might want to set up for an activation, you do not need a Discover Pass

to drive through a park. The exact wording of the rule: “If you just want to drive through state recreation lands managed by DNR and WDFW and you do not leave your vehicle, you do not need a pass”. I will leave it to you to decide if “doing a POTA activation without leaving your car” is a legal loophole... probably not worth taking the chance!

Also note that at parks that do not have automated pay stations you cannot purchase the annual pass—you can only buy a day pass and pay with cash or check. And if you lose your pass, that’s too bad—it’s just like losing cash. You can only get a replacement if yours is damaged, but the license plate number and expiration date are still legible.

The rules get a little more complicated for those venturing out during the winter months into the so-called “Sno-Park” recreation areas. There are also specific trailhead forest locations that require the pass as well. This would apply more to SOTA activations, as most of these areas are in the mountains.

You can read more about the Discover Pass and State of Washington rules regarding them at [this LINK](#). -Dave W7UUU





RADIO CLUB of TACOMA PARKS ON THE AIR

Since starting to organize our club's POTA activations last year I have witnessed an increased interest among club members and even our guests. We usually have between three and five stations set up at our activations using various modes. And although we statistically don't make hundreds of QSOs, the days we spend in the park together *are always* rewarding. One of the most important aspects of our POTA activations is learning to set up and activate portable radio stations. There is a big focus on different types of antennas, tuning antennas with an antenna analyzer, various rig configurations, and how to operate digital modes. It's a hands-on learning experience and we welcome members and guests to join us at any of our monthly POTA activations and encourage everyone to get on the air regardless of your license class.

Last month we set up our portable stations at [Lake Sammamish State Park](#) in Issaquah. This is a very family friendly park with nature trails, playgrounds, and a very nice beach. It's a big park with lots of open space to erect a temporary mini-antenna farm consisting of a Hexbeam, a couple of different verticals, and an EFHW configured as an inverted-

vee. Although the morning was a little gray, the sun soon revealed itself from behind the clouds to warm things up and bring out the crowds. This can be a very busy park on nice days, so arrive early!

As the summer winds down here in the Pacific Northwest we have scheduled 2 more exciting parks to take advantage of the great season we've been having here. On September 7th we will be at [Flaming Geyser State Park](#) (US-3187). And to welcome the fall season and the [POTA Autumn Support Your Parks](#) weekend we will be operating from [Saltwater State Park](#) (US-3262) on October 20th.

And last but certainly not least, the Radio Club of Tacoma has a new Club POTA Kit! The kit contains an [Elecraft KX3](#), [Hardrock 50 amplifier](#), a Buddipole antenna kit, a CW key, a Signalink USB for digital work, and of course some batteries. Club members can check out the kit from the club on Saturday and bring it to club sponsored activations. This is a great kit for club members who don't have their own POTA gear, but want to

come out and participate in our activations. Of course, members and guests are always invited to attend and get on the air!

Until next month, 73 and POTA on!

-BJ WA7WJR



David, KK7NYW



Leah, K7IPT



ATTRACTING YOUTH TO HAM RADIO: Get Out of Their Way!

By Frank Howell, **K4FMH**

Amateur radio has a demographic problem. In the U.S., there is a clear belief that members of the hobby are old. And getting older. What that means in actual age distribution just isn't known. Unfortunately, our "visions of gray" are based not upon accurate scientific measurement but on the assembled impressions we get through our personal "windshields" as we go about our daily travels. It's standard convention to hear us hams urge everyone in hearing or reading range: we need to get more young people into amateur radio!

But *whose* amateur radio? The extant one driven by us largely gray-haired middle-aged to geezer-dom adult (men)? Yep, that's the one generally being referred to in this wisdom. Our collective strategy amounts to getting them to come to "us." *How's that working out for us?* Given that our knickers are a bit tangled up over the issue, I'd say not so good.

[Lee Corso](#), the curmudgeonly ESPN television sports announcer, is famous for his *Not So Fast!* comment when he questions another view or approach to the featured college football game being broadcast. Our attempts to bring new, young hams to our clubs is, in principle, admirable

and understandable. But *how is that working?* Imagine a hobby dominated by young people. Say, competitive eSports (video games). We geezer-dom adults are approached to come to a teen-driven club, learn about it, and then join to continue to attend each month. How many readers would find that appealing? I'd bet *not that many*.



Not so fast, says Lee Corso!

My recent interview in [Episode 319](#) of the ICQ Podcast with Graham Brody **KD9NTQ** illustrates the clear market failure that this singular "come to us" approach has yielded. Graham's interview suggests that while this is a good outreach program for many young prospective hams, it's not enough to engage them broadly. And, it simply does not reach the market where the most likely candidates are socially engaged. Instead, Graham says help them get started...and get out of their way!



GRAHAM KD9NTQ STARTED THE ILLINOIS

Young Ham Club to engage young people to converse about ham radio and grow into the hobby. We should listen to him and learn what one approach is to do what we collectively tell one another must happen. Talk is cheap. The walk, well, is just more effort. I'll let you listen to my interview with him for the nuances of the details. But here are some bullet points that are take-away strategies.

- Do encourage young people to get involved with adult-driven ham clubs. But then encourage, sponsor and assist them to create their own youth-driven groups. Get out of their way but be available to help when called upon!
- Rich environments for exposing young people, both male and female, to amateur radio lie in Maker Spaces and Gamer Groups. Seek out, especially, maker spaces which tend to be advertised in local communities. Clubs should offer to give a demo—not longer than 30 minutes—without a lecture but with an actual demonstration of amateur radio operations.
- ARRL and RSGB should “tag” youth-driven or youth-oriented clubs in their Find-A-Club databases. Graham found the North Shore ARC in the Find A Club database. The Illinois Young People Ham Club, for instance, should be tagged as a youth club as should any others.

ALL ARRL-affiliated clubs should report annually the number of members who are less than 25 years of age so the League can track them. This should be a bench-mark metric to gauge progress in recruiting youth into amateur radio and the League itself. (To my knowledge, the ARRL is doing nothing released publicly to track youth members or contacts.)

- ARRL should offer a “build a club” set of actions to help young inquirers to the League start their own club. They will want to engage with others of a similar age range, Graham says, and the League should explicitly foster that activity, perhaps matching them with an existing adult-driven club for assistance. Be there if asked but get out of their way when they are enjoying the hobby! Walking the walk here as the League has already been talking the talk.
- Should the ARRL and RSGB buy adverts (or give ad swaps) in gaming magazines, promoting ham radio contesting as a greater challenge? Yes! Track the “how did you find out about us” using conventional “use this code” tags in the adverts. If one thinks they'll just run across QST at their local Barnes & Nobles, they are very sadly mistaken. Graham bumped into ham radio on YouTube!
- **Help them get launched. Get out of their way. They will grow into mid-adulthood and join our extant adult-driven clubs.**



Plant the seed. *And get out of their way!*

It is unfortunate that many organizations are heavily imbued with a “not invented here” mindset. That is challenging for outsiders to the inner circle of power to break through. See the [thread](#) and comment by [W9WHE](#) on eHam.net regarding the ARRL, for instance. There are many other examples of this opinion regarding the League. I suppose similar comments could be made about the RSGB, of which I am also a member. But whether “invented” by the central staff or Board of either organization, this teenager has given us a general road map to reaching young people, both boys and girls, similar to him: interested in technology but had to run across something called “amateur radio” on YouTube rather than the explicit efforts of the League. Quit talking without walking.

Graham’s a leader at *age 15* already, just won his Extra license, and clearly has an understanding of many of these issues. We have to resist the conjuring up of all the reasons of why they won’t work from a geezer-dom world view. Well, a guy like me can dream, right?

[Frank Howell, K4FMH](#), is a regular contributor to [AmateurRadio.com](#) and writes from Mississippi, USA. Contact him at k4fmh@arrl.net.

■ -editor

YOTA: What’s in a Name?

Were you aware there is a national organization dedicated to ham radio “youth on the air” activities around the world? They’ve been around as a movement for a number of years, encouraging support for amateur radio youth activities around the world. You can read all about them at this [LINK](#). But at one time, they were called “Youngsters” on the air, not “Youth”. Why the change? The management committee learned that in other parts of the world, there is a negative connotation to the word “youth”. In some regions, “youth” is a pejorative term for “problem children”. But in the US, the word “youngsters” seems an outdated term used by grumpy old men, often followed with “get off my lawn!”. So YOTA decided to stick with “Youth” for the United States, and is actively working on slight changes in other regions to meet those differing interpretations. But whichever word you choose, YOTA is a vibrant force around the world encouraging the engagement of younger generations with the hobby and service that is amateur radio. I highly encourage readers to [visit their web-site](#) and learn about the multitude of youth-related programs under their umbrella. Whether you call them youth or youngsters, YOTA participants are changing the face of amateur radio

-Dave [W7UUU](#)



EMERGENCY COMMUNICATIONS

Amateur Radio EmComm News & Topics

By Doug AB7DG



THE INTRODUCTION OF A 2012 EMCOMM PLAN of the Radio Club of Tacoma (RCT) stated:

"There is broad knowledge and wide agreement that emergency communication is the fundamental reason the FCC provides protection to the amateur radio spectrum through FCC Rule 97.1. In return, amateur radio (and the RCT) accepts a generalized obligation to acquire operating skills, organizational structure and equipment in order to provide an emergency communication service to governmental agencies and the community at large on request and within established regulations and policies. However, the RCT's own Corporate Articles are more specific. In the RCT Articles of Amendment, Article Two – Purpose, there is the following quote:

"This Corporation has been formed for the following purposes:

1.(C) Organize and train a pool of licensed amateur radio operators capable and experienced in maintaining radio communications during periods of public emergencies and disasters."

But actually, what role will RCT members play in the event of a disaster? Those members wishing to assist local public officials with radio communications in emergency events should become active participants in ARRL's program named "Amateur Radio Emergency Services," commonly called ARES. In Pierce County, hams can join ARES via the local group's website: www.PierceCountyARES.net. Members of our local ARES group (sometimes called Western WA District 5 ARES) train to become effective participants in the [National Incident Management System \(NIMS\)](#), an approach to incident management developed in 2004 by the U.S. Department of Homeland Security and its [Federal Emergency Management Administration \(FEMA\)](#). The NIMS system is used throughout the

US in emergency incidents. A key component of NIMS is the Incident Command System (ICS), used to large and small incidents. ARES members train in the use of various ICS forms and radio modes (especially Winlink) for radio communication in support of public officials managing an incident.

And in Washington state, ARES members willing to work radios in the county's Emergency Operations Center or to be deployed away from their homes must become registered as WA State Emergency Workers, requiring completion of several FEMA online courses that address the NIMS and ICS systems. Presently in Pierce County ARES, we have about 140 registered Emergency Workers, and about 180 at-home-only members.

In a local or regional emergency incident, hams who have not joined ARES and trained to be proficient in the tasks and procedures prescribed by NIMS and ICS likely will not be used by public officials or ARES leaders. However, another aspect of EmComm is assisting disaster survivors to notify their distant loved ones about their health and welfare. Hams who are not active members of ARES can use their skills and equipment to provide health and welfare radio messages for those survivors. The EmComm articles in the March through June 2024 issues of The Logger's Bark describe the "I AM SAFE" health and welfare messaging system. Those specific articles are downloadable from the EmComm page of the club's website, <https://w7dk.org/emergency-communications>.

All members of the club are encouraged to become able, following a disaster, to provide health and welfare messages for their own neighbors and the survivors at any nearby shelters. And we hope to recruit and train some club members to use the club's HF radio equipment (an ARRL Official Emergency Station) to transmit I-AM-SAFE message files beyond the area affected by a Cascadia earthquake or other major disaster.

Doug Schafer, AB7DG, RCT EmComm chair



STRAY TOPICS OF INTEREST

Fun stuff for Hams to read!



W7UUU

Hidden Word Contest!

Somewhere in this edition of the Logger's Bark is a hidden word. If you are the first to find that word and report it to your Editor, you will win a free QRZ Sticker mailed to you! **This month's word is *Geloso*!** It will be hiding in a sentence—just tell your editor via email what the word is and the page and you will win if you are the first! (*THIS page* doesn't count!)

Hams Helping Hams

Recently, the Radio Club was contacted by Jack Kalina, **WA7VDI**, up in Auburn needing to take down a Yagi, rotator and small tower in preparation for a move. So one sunny day, Dan Vacanti, **KD7SV** (red shirt) was joined by Mike **W7MKE** to go up on the roof and do the deed for Jack. It's the culture of amateur radio that makes the hobby much of what it is ... Hams Helping Hams. Thanks to Dan & Mike

■ -editor

THE GELOSO RADIO COMPANY was founded in 1931 by Italian Giovanni Geloso. The company operated from 1931 until 1972, manufacturing a wide range of electronic products in Italy. While mostly home consumer products such as table radios, tape recorders, record players, televisions, and audio power amps, Geloso also produced a small line of amateur radio transmitters and receivers. Though seldom seen outside of Italy in their prime, Geloso electronic products have become collectibles over the years. The first Geloso ham products appeared in 1952 with the model G. 207 receiver, followed in 1955 with the G. 210-TR transmitter. The transmitter pictured below is the model G 222-TR introduced in 1962. It was later replaced with the G 223-TR which offered greater VFO stability.

■ -editor



1962 Geloso amateur transmitter
Photo by Iron Bishop—Wikipedia



Photos submitted
by Mike **W7MKE**

W7DK LIVING HISTORIES

Member video interviews and profiles

W7UUU



BACK IN 2015, when I was helping to organize the W7DK Centennial Banquet and Celebration, I asked about possibly recording video interviews of club members for future generations to learn more about those that came before them. However, that plan like so many things in life, sort of slipped by the wayside and I truly regret not revisiting such a project much sooner.

The fairly recent loss of our most senior member, Worth Gurley, **W7WG**, a true friend to all who knew him and to strangers alike, reminded me of the extreme importance of capturing aspects of our members lives and involvements not in only ham radio, but also with the Radio Club of Tacoma.

So I've finally got that "round TUIT" that I should have found sooner and have embarked on recording what I am calling the W7DK Living Histories Project. For this effort I video a short (15-20 minute) interview with our members in a free-form format to allow them to share some insights into how they came to amateur radio, and how they became involved with the Radio Club of Tacoma.

So far I have produced a small number of these

videos but it's an ongoing process, and I hope to continue until all members who wish to participate have had a chance to do so.

One of the challenges of any such project is where to store the data that is the encoding result of all the video that is produced and edited. If stored on a local computer such as at home it is subject to the failures we all know can happen: fire,

electronic failure, physical loss (where did I put that hard drive?) or other calamities. Storing at the clubhouse doesn't fare any better in the long run.

So the videos are being uploaded to YouTube, where they have a strong chance of remaining there for a

great many years to come. Several are already uploaded, with several more in editing and more on top of that slated to shoot.

I hope to record such histories of ALL members who wish to tell their stores—please contact me if you would like to participate.

Please enjoy this series of videos, with a new link every month. Click the image to watch the video.

-Dave **W7UUU**

W7DK Living Histories Project #9



Click picture to watch the video



W9EVT (SK)



Gary WG7X

This is the handsome shack of Gary **WG7X**... left to right: Mercury LUX amplifier brand new out of the box! Dell Windows 8.1 PC (**says Gary**: "The most important thing in the shack sometimes!"). After that the Icom IC-7610 with an Icom IC-756 ProIII on top of it for a backup rig. On top of that is a small MFJ meter used just with the 756... the "real meter" is an LP-100A. On the far right is the ACOM 1010 amplifier sitting atop the Palstar AT-4K tuner. And on top of that, a nice Drake SP7 speaker that once was paired with a Drake TR7 transceiver. "What's not to like?" Gary adds. Very nice station indeed!

TNT THE NEW HOT THING

Hot and new products to think about



W7UUU



THIS MONTH'S NEW HOT THING article was sent to us by Don **KL7KN**, who has been involved with the project for some time as a volunteer, and is currently writing the English language manual for this amazing little transceiver from China.

Says Don: "The Venus radio set SW-6B is a lightweight, rugged, miniature, single-conversion transceiver that operates (and transmits) on six internationally allocated high frequency bands within the Amateur Radio Service. It may be powered with any stable DC source between 10 and 14 VDC. Please note that ANY 'ripple' in the power supply will be heard on the transmitted signal.

Power consumption is minimal, about 70 mA. With the internal speaker on, the radio draws ~100 mA. Actual current used will vary slightly based on input voltage.

The radio set SW-6B also offers broadband reception from 3.5 to 22 MHz in the shortwave bands. This broadband feature also allows reception of WWV on 5, 10 and

15 MHz for frequency checks, as well as time and weather reports. Reception of International Shortwave Broadcasts using USB mode is possible with careful tuning.

The unit is all digital. The VFO control provides for tuning in 10 Hz, 100 Hz, 1kHz, 100KHz increments. The RIT/XIT function permits receiver offset tuning in 10 Hz increments and transmitter offset tuning in 100 Hz increments.

In addition to manual tuning via the rotary encoder, eight memories per band are provided to store frequency/mode. Changing between stored Memory and the VFO is by a pushbutton. Changing between Memory locations is via the VFO control. A slide switch is used to change between bands.

Placement of the operator controls and connectors only on the front of the chassis clearly puts this radio in the class generally known as Trail Friendly. With both the bottom and sides of the chassis free of control ports, you may place the radio set upright, on a stand or tilt the radio set for the best viewing angle and not impact any connections. While seemingly a minor detail, this flexibility is a nice touch for operating in the field.

The high-contrast OLED digital display is large enough to read in bright light. The brightness level of the display is adjustable in five steps. .

The receiver is single conversion, with a crystal ladder filter to reduce noise and adjacent signal interference. The Beat Frequency Oscillator (BFO) is fixed and operates at 4.914 MHz. The BFO injection signal to the second mixer signal is provided directly by the Si5351 DDS

(Continued on page 61)

[Click to visit the Manufacturer's Site](#)

TNT THE NEW HOT THING

Hot and new products to think about



W7UUU

source. Very clever and ensures the BFO signal tracks the VFO exactly.

The filter may be set for narrow (CW/CWR) and wide (USB/LSB). This bandwidth change is controlled by a simple pushbutton and is automatic, depending on the mode selected. Receiver performance is impressive, with Minimum Discernable Signal (MDS) levels of 0.1 to 0.2 microvolts (-127 dBm @ 50 ohms) typical.

The transmitter is a classic Master Oscillator/Power Amplifier (MOPA) type fed directly by the DDS system. The transmitted signal passes through a 74ACT00 (Quad 2-Input NAND Gate) device in lieu of a conventional driver chain. This then feeds a single power amplifier.

The transmitter final amplifier (PA), is a robust IFR510 (Q8). The PA is robust enough that a 'protection diode' is unneeded. The antenna is attached via a BNC connector mounted on the front of the unit.

The internal keyer supports iambic keying via a set of operator-supplied paddles. Use of a straight key is supported as well. (See Operation Manual above for more on keys). A keyer memory allows automated calling of CQ w/Operator callsign at the push of a button. Keyer speed is easily adjusted on the fly via a front panel control.

Operating on a DC input between 10 and 14 Volts DC, the radio transmits with a nominal power of five watts output with 12.8 DCV applied. The power input is protected against reverse polarity. External power supplies should be able to provide up to 2 amperes of current with no AC ripple. A simple battery pack made up of eight "AA" (or 10 NiMH) batteries provides ample power. The radio supports an optional, internal, Li-ion battery pack as well.

The radio boasts a Tayloe type SWR indicator, which contains a resistive bridge protecting the PA device during tune up. This is switched in and out of the antenna circuit with a single (TUNE) switch.

Please note that the unit transmitted power output drops off with lower input (supply) voltage. The SWR indicator may be safely left in the TUNE mode as well, to reduce output power during operations.

Estimated price will be around \$300—which is amazing! Release date to be announced soon...

Keep an eye on Venus Tech for updates at their website".



The SW-6B on the bottom is the successor to the very popular SW-3B above it, with an Altoids tin on top for size

Photo by Don KL7KN

A big thanks to Don KL7KN for his write-up of this interesting new QRP transceiver. This is bound to be a popular rig in the QRP community of amateur radio.

-Dave W7UUU

[Click to visit the Manufacturer's Site](#)

COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU

ONE OF THE TRUE AMERICAN CLASSICS in amateur radio is the [Century 21 CW transceiver](#) from Ten-Tec. It's an interesting rig—in its simplest sense, it was designed for Novice operators of the era, offering a maximum power limit just under the 75-watt limit for Novices (around 30 watts output on 80 meters but much lower on the higher bands).

The receiver is a direct conversion design, or as Ten-Tec called it, a “double direct conversion receiver,” which is just a more cumbersome description of the function.

There is no AGC provision (automatic-gain), so like many simpler receivers from the past, users need to be adept at using the RF and AF gain controls to tame stronger signals (reduce RF gain, raise AF gain) while maximizing weak ones (raise RF gain, reduce AF gain). It's largely a lost art for newer hams but is easy to get used to.

One unique feature (common to Ten-Tec and a few Drake rigs of the 1970s) is there are no resonant tuning adjustments to make in the final amplifier. In other words, no tuning capacitors to load the antenna like in older tube rigs where users had to “dip the plate.” The Century 21 has broadband tuning, so band changing is as simple as turning the bandswitch and remembering to switch antennas.

There are other interesting quirks of the Century 21:

the Offset Knob... this is used to set the receive frequency either above or below where the transmit frequency (VFO dial is set). It's rather like an RIT (receiver incremental tuning). Modern transceivers set the receive frequency to be a standard offset from transmit—typically 700 Hz (set via the menus of modern rigs). But with many older rigs, this had to be done manually.



Ten-Tec Century 21
Photo by W7UUU

The Offset Knob works in concert with the Zero Beat Button (to the left of the tuning dial). Pressing that defeats whatever position the Offset is at, and effectively zero-beats the incoming station to the transmitter frequency. The Offset and Zero Beat are functions not found on modern radios and take a little practice to get the hang of. If you don't set them right (for example, just hitting the Zero Beat and calling it good), you may end up on a zero beat or “null” to the other station, and they won't hear you! So after zero-beating, you'd then turn the offset to achieve a pleasing

(Continued on page 63)

COOL OLD RIG O'THE MONTH

A look back at the cool gear of the past

By Dave W7UUU

(Continued from page 62)

receive tone from the other station. In practice, it's not as goofy as all this sounds—it's pretty quick to learn.

One important aspect of the Century 21 is that using early solid-state finals, there is not much tolerance for high SWR (high standing wave ratio, or antenna mismatch). So it's important when gearing up to transmit that you dial in the frequency where you'll call CQ (or near the frequency if answering a CQ, of course in both cases calling "QRL?" to see if the frequency is clear). Then you adjust the power level down to a very low QRP level. Only then should you key the transmitter and adjust your antenna tuner. Try to achieve the best match possible. If you try to key up into a high SWR, the transceiver will instantly just shut off! No warning—no indicator—the protection circuit just kills the radio, and you have to power it back on.

For this reason, all the time I had my Century 21, I just ran it at "near QRP" levels—typically 10 to 15 watts, no more. Trying to eke every last watt out is bound to kick the rig off at the least desirable moment while in the middle of a great QSO! Geloso

And one of the greatest features of the Century 21 is that legendary Ten-Tec QSK. For those not familiar, QSK refers to how fast a transceiver using CW can switch from transmit back to receive. Ten-Tec was one of just a few CW rigs of the era that was essentially zero-QSK—meaning that even when sending at a high CW speed, in between each dit and dah, the receiver can be heard! This makes it great for activities such as contesting, where you might start a new "CQ contest" call but then realize someone is already answering—you can hear

that station in between the dits and dahs of your own sending, and thus quickly stop to copy the other station. It works amazingly well. Original selling price of the Century 21 at introduction in 1975 was \$289, which inflates to about \$1700 in today's dollars.

Alas, my own Century 21, as pictured in this article, was destroyed in my October 2020 shack fire. But one day, I'll probably look to replace it. It's a great old rig for the CW operator and to this day, lots of fun to use!

-Dave W7UUU

TEN-TEC CENTURY 21. The Exciting New 70-Watt, 5-Band CW Transceiver That's Surprising Everyone, Beginner and Old Timer, With Its Super Performance and Low Cost.

- Full Break-In • Full Band Coverage on 3, 5, 7, 14, 21 MHz Bands, 1 MHz on 28 MHz Band • 70 Watts Input
- Total Solid-State • Receives SSB and CW • Receiver Sensitivity 1 μ V • Instant Band Change, No Tune-up • Offset Receiver Tuning • 3-Position Selectivity • Adjustable Sidetone Level • Linear Crystal-Mixed VFO • Overload Protection • Built-In AC Power Supply • Black & Gray Styling • HWD: 6 1/4" x 12 1/2" x 12"; 15 1/2 lbs. • Matching Accessories

THE RECEIVER. Double-Direct-Conversion. Easy tuning. Just select the frequency and set the audio level. Excellent cross-modulation characteristics. Offset tuning so you can tune either side of zero beat to reduce QRM. Front panel control selects one of 3 selectivity curves: 2.5 kHz for SSB reception, 1 kHz for normal CW, and 500 Hz for when the QRM gets rough. Plus separate AF and RF controls, headphone jack, and built-in speaker.

THE TRANSMITTER. Total solid-state. Push-pull Class C final amplifier. Individual low-pass filters are switched into the antenna line to reduce unwanted radiations, minimize TVI. No tune-up needed when changing frequencies or bands. And full break-in allows incoming signals to be heard between transmitted characters. Now CW is real conversation!

THE VFO. Common to receiver and transmitter. Permeability tuned. Linear scale. 5-5.5 MHz basic frequency is crystal-mixed to the desired frequency so bandwidth and stability are the same on all bands (crystals included for 3.5, 7, and 14 MHz bands).

THE POWER SUPPLY. Built-in, AC operated, and regulated. Monitors current demand, shuts down automatically when necessary for protection. Lighted input current meter shows proper Drive setting.

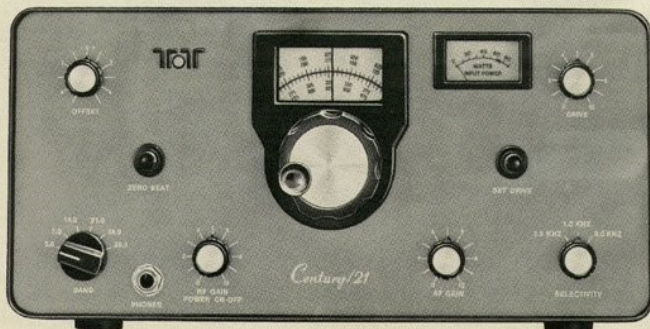
MATCHING ACCESSORIES. Model 670 Electronic Keyer, 6-50 wpm, self-completing characters, powered by the Century. Model 276 Calibrator for markers at every 100 and 25 kHz. Model 271 Crystal for 21-21.5 MHz; 272 Crystal for 28-28.5 MHz; 273 Crystal for 28.5-29 MHz.

570 Century 21 Transceiver	\$289
670 Century 21 Keyer	\$ 29
276 Century 21 Calibrator	\$ 29
271, 272, 273 Crystals ea.	\$ 5

See the surprise of the CENTURY 21 at your TEN-TEC dealer - or write for full details.

TEN-TEC, INC.
SEVIERVILLE, TENNESSEE 37862
CIRCLE 27 ON READER SERVICE CARD

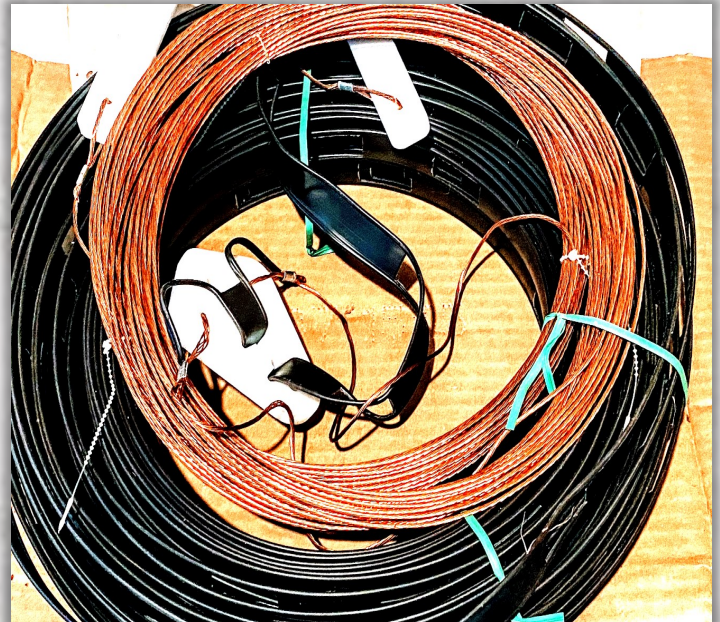
THE SURPRISE OF THE CENTURY



ANTENNA TIME

Notes, tips and projects

By Bob K7MXE



A VERY INTERESTING SUBMISSION to this month's Antenna Time column came from Bob **K7MXE**, who happened to stumble upon a "new in original box" Drake AK75 Multiband Antenna..... Yep! The Robert L. Drake company actually sold an antenna at one time. There are very few references to the AK75 on the web. But from what I've been able to determine, it was introduced in 1981 and only sold for perhaps one year. The price was \$29.95 which inflates to just over \$100 today, so it was certainly more costly than building an equivalent. There's not much to it: 135 feet of wire, and 100 feet of 470-Ohm balanced feedline (plastic "window line"). It's rated for use on 160-10 and rated at 2000 watts PEP. There is no balun—no SO-239. It's simply a 135' dipole that must be connected to a balanced tuner such as the Drake MN-2700 KW Matching Network that would have been "period correct".

The fact that in all my nearly 50 years of ham radio activity and countless ham fests and tailgate sales I've never once seen nor heard of the AK75, it leads me to believe the somewhat high cost probably was a turnoff to many hams. Based on "deflating" modern prices for 135 feet of antenna wire and 100 feet of window line, the materials to build this antenna back then would have only been \$50 if new and a lot less if scrounged. For such a simple antenna, it was simply overpriced. Thanks to Bob **W7MXE** for submitting this interesting item. -Dave **W7UUU**



Drake MN-2700 Matching Network that would have been well-suited to match a radio to the AK75 antenna



10 Tips for Setting Up your 1st Shack!

EVERY NEW HAM has to find their own path to setting up a fun and effective station, either being a Technician or starting out as an “Extra in one day”. Here’s a list of 10 considerations new hams should consider when getting started:

- Don’t skimp on your operating desk—go bigger than you think you’ll need. A used solid-core 36” door over a pair of 4-foot-tall file cabinets works great for starting out!
- Make shelf risers to add to your desk—main radio(s) below the risers, then small accessories can go on top
- Buy a good-size clock that displays both UTC and local time, that is easy to see from the operating position.
- Put up a large cork board to display QSL cards and all those certificates you’ll be dying to earn!
- If at all possible, locate your shack on the first floor or as close as possible for grounding purposes.
- Make sure your operating chair is very comfortable—you’ll be spending lots of time in it! Source a good one!
- Consider a filing cabinet and book shelves for references
- Plan your wiring on paper before building the shack—you won’t regret this detail in your planning
- Have plenty of AC outlets, but stay far away from plastic power strips. Only use metals strips for fire safety. And never overload them or plug one strip into another.
- Have two lighting styles: low and easy on the eyes for late nights, but have bright and clear available for working on projects or taking notes, etc.

There are of course *lots* of other considerations (carpeting, heating and AC, isolation from noise and activity in the home, etc.) but this list represents what I consider to be the most important aspects of “new ham shack design”.

-Dave W7UUU

Upcoming Ham Fests in the Area

September 7. Matanuska Amateur Radio Association Hamfest. Big Lake, Alaska. <http://kl7jfu.com/mara-2023-hamfest/> *This is an ARRL Sanctioned Event.*

September 22. Delta Amateur Radio Society CommFest. Delta, BC. https://hambone.ca/rac/events/detail.php?event_ID=2362

October 3-4-5. Microwave Update/Western Canada Weak Signal Association/Pacific Northwest VHF Society Conference. Vancouver, BC. <http://www.pnwvhfs.org/> <https://wcwsa.ca/>. [Flyer in PDF.](#)

October 19. Kitsap County ARC Hamfest. Bremerton, WA. <https://kcarc.org/hamfest/>

October 19. Swaptoberfest. Rickreall, OR. www.swaptoberfest.org [Note: The webpage shows the year '2023'. This has not been corrected due to technical difficulties. The flyer is correct.] info@swaptoberfest.org [Flyer in PDF.](#)

October. Walla Walla Valley ARC annual tail-gate swapmeet. W7DP Clubhouse, 1504 Justice Ave, College Place, WA

Listings courtesy: Lynn Burlingame www.N7CFO.com

Got a cool shop tip? Send it in!

HAM TECH 101

-By Jim Peisker, **AF5NP**
Used with Permission

Useful tech info for newer hams and old Filters for Eliminating RFI

A POTENTIAL REMEDY FOR Radio Frequency Interference, or RFI (in addition to shielding), is some form of RF filtering. Filters are used to either reject (attenuate) or accept (pass) signals over a range of frequencies. A couple of license exam questions down below exemplify this topic.

Filters are a fundamental concept in electronics but details can get complicated so we will share only basic info and give several references for your own research.

Before reading further the reader is strongly advised to review an excellent article, [Introduction to Filters](#), from All About Circuits. Credit to that site for the filter diagram below.

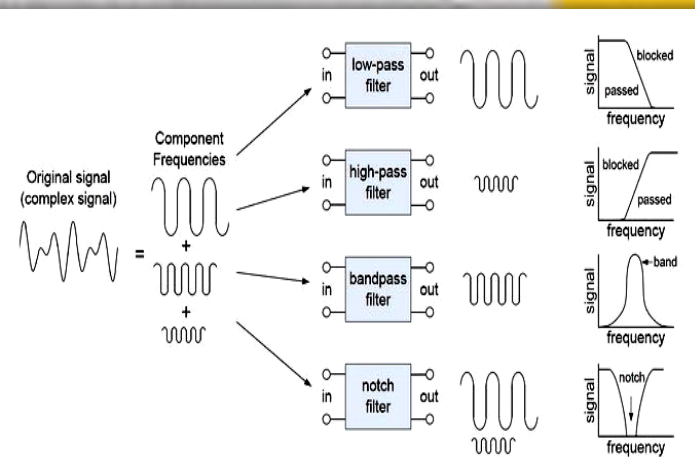
Filters can be categorized into four essential types:

Low-Pass: Passes frequencies below cutoff and attenuates higher frequencies

High-Pass: Passes frequencies above cutoff and attenuates lower frequencies

Band-Stop & Band-Reject (Notch): Attenuates frequencies within a specific range, passes others

This diagram compares and clearly illustrates how these four operate:



Regardless of design and type, all filters will introduce some loss of the passed signal (insertion loss). Good filter designs will minimize loss and allow the protected device to function properly.

In audio equipment the tone controls are typically high-pass and low-pass filters with adjustable cutoff for treble and bass. More sophisticated tone controls may add a mid-range adjustment while a graphic equalizer adds filters for multiple narrow frequency ranges.

Many RFI filters are low-pass because hams may need to remove transmitted HF or VHF/UHF signals from low frequency (50/60Hz) AC power lines, audio (25Hz-25kHz) signals, VGA video (31kHz) signals, or lower-frequency (AM) radio.

Filters can be made using active circuits and/or software but more commonly, RF filtering is accomplished with simple passive electronic components: capacitors (C), inductors (L), and resistors (R). Simple LC, RC, RL, or RLC filters can be made from combinations of these parts. The simplest low-pass filter is a capacitor across (shunt) a signal, an inductor in line (block), or both.

Besides electronic components, something completely different and maybe unexpected can also form of passive low-pass filter. Ever wonder what that bulge is near the end of many audio, video, and computer cables?



(Continued on page 67)

HAM TECH 101

-By Jim Peisker, *AF5NP*
Used with Permission

Useful tech info for newer hams and old

Filters for Eliminating RFI

Specifically, it's a [ferrite bead](#) or choke. If you cut one open, under that plastic cover you would find that the cable passes through a gray tube.



That tube is made of ferrite material, a ceramic with high iron content and high [permeability](#). While more complex than this, an easy way to visualize how ferrite beads work is to say that the higher frequency signals passing through them are coupled into the material which becomes resistive over the intended frequency range and dissipates the unwanted energy as heat, while passing through the lower frequencies with minimal attenuation.



Seems a bit mysterious and magical, but it's science. Different ferrite compositions have varying frequency, power handling, and temperature characteristics so selection is critical.

Ferrite beads (chokes) are typically simple and inexpensive interference filters to install on household and ham cabling to solve RFI problems. Add-on clam shell ferrite suppressors can be snapped in place over existing wiring.



Wires and cables can also be fed through ferrite tubes or toroidal cores if openings are large enough. A large opening also allows for cabling to make more than one pass through the ferrite, increasing its effectiveness (at expense of increased inductance).



Useful web links

[What Every Electronics Engineer Needs to Know About: Filters](#)
– InCompliance

[Filter Basics: Stop, Block, and Roll\(off\)](#)– Nuts&Volts

[What is a Filter?](#)– FEEE

[RF & Microwave Filters: the basics](#)– electronicsnotes

[Filter \(signal processing\)](#)– Wikipedia topic

[EMI/RFI Products And Other Resources](#)– ARRL

[Ferrite beads reference](#)– electronicsnotes

[Basics of Ferrite Beads](#)– YouTube video by W2AEW

[How Do Ferrite Beads Work and How Do You Choose the Right One?](#)– Altium

GEAR

Guest Columnist: Dave Jensen W7DGJ



ALL KEYED UP FOR MY NEXT QRP RUN!

It's easy to find a cheap key if you look on Amazon, eBay or AliExpress. Finding a cheap key is easy, but finding a GOOD cheap key . . . that's a lot harder.

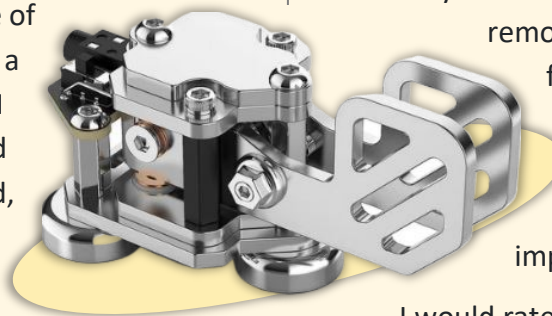
I tried a tiny paddle offered on eBay by a number of sellers from China (see first photo). It looks great, because it has a magnet on the bottom and is extremely compact in size. I could see how this little guy would mate up nicely with my Mountain Topper or either of my other two QRP radios. And the price couldn't be beat, at around \$35 with shipping. It's a no-name product, but you'll find many of them.

Well, as it turns out, the price CAN be beat, in fact quite easily! That's because what I received didn't even work. It was literally a piece of junk that required me to pull out a soldering iron to repair it before I could put it into use. Once I could get a "dit" and a "dah" generated, I found out that the magnet on the bottom of the key was so weak that it would slide all over the surface of whatever I attached it to. It turns out to be completely unusable, and a waste of my \$35. The return force uses a cheap spring that must cost less than a penny, leading to a poor overall build quality rating, and the user experience rating a total fail. If you own one of these, my guess is that you eventually glued it to something with some weight. Good luck pounding out code on this thing!



For a few dollars more, I acquired the good looking [Putikeeg mini-key](#) for a serious improvement in performance. The issues I had with the cheapie disappeared, as this one actually worked from the onset. It came with a removable cable and a "right/left" switch to easily change it over if you are left-handed. It's a modern-looking key that has a magnetic return, not often seen on an inexpensive unit. This one is also sold by numerous sellers from Asia on eBay and other websites.

The adjustments for paddle travel are made by two tiny nuts requiring the use of an included tool. It was difficult to get them the way I like them, but it became usable with a few minutes of adjustment. The magnets are so strong that they lock onto your surface and you will won't be able to remove it without scratches, which I found out the hard way. That's why several rubber pads are included to go over these extra-strong magnets and reduce the impact on your radio or desk.



I would rate the build quality of this unit at a B, primarily due to a few blemishes on the finish and the difficulty to get the fine-tune that I am used to on the paddles. My experience was rated a B as well. But it's a bargain at \$35 from AliExpress, and sells for anything from \$62 to \$150 when you buy it on Amazon or eBay. The steel plate it is mounted to in the photo is my own, and not included.

I felt like I was still searching for the perfect paddle

GEAR

Guest Columnist: Dave Jensen



for my upcoming POTA trips, so I took some advice on the Mountain Topper Facebook forum and invested in the American Morse brand key called the Ultra Porta Paddle, which I have attached to a leg strap. This isn't even in the same category as the other two keys . . . this baby is built. It's produced in California (versus China on the other two) and constructed of Mil-Spec anodized aircraft grade aluminum in a rose-gold color, looking much like the construction quality of an Apple iPhone. It uses a Neodymium super magnet return along with sealed ball bearings, all protected within a full enclosure.

The gap and closing force adjustments are easy to use and located on the outside of the key. It weighs just a tad over 2 ounces, but feels like it is constructed extremely well. I had it up and running on my leg within minutes, with the perfect travel distance on the paddles.

Doug at American Morse tells me that he gives an unconditional lifetime guarantee along with his keys. This one rates an A in both build quality and user experience! When using it, I felt as if I were at my home shack, pounding away on a Kent or Bencher or something of that quality. Even the leg mount accessory, which is one of several optional mounts, is made out of powder coated aircraft grade aluminum.

Once again, you get what you pay for as this one retails for \$169 delivered. You can find it at the website of [American Morse](https://www.americanmorse.com).

Until next month—Dave **W7DJJ**

ABOUT THE AUTHOR



Dave Jensen, W7DGJ, was first licensed in 1966. Originally **WN7VDY** (and later **WA7VDY**), Dave operated on 40 and 80 meter CW with a shack that consisted primarily of Heathkit equipment. Dave loved

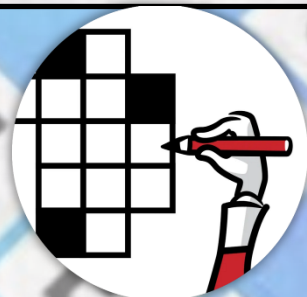
radio so much he went off to college to study broadcasting and came out with a BS in Communications from Ohio University (Athens, OH). He worked his way through a number of audio electronics companies after graduation, including the professional microphone business for Audio-Technica. He was later licensed as **W7DGJ** out of Scottsdale, Arizona, where he ran an executive recruitment practice (CareerTrax Inc.) for several decades. Jensen has published articles in magazines dealing with science and engineering. His column "Tooling Up" ran for 20 years in the website of the leading science journal, *SCIENCE*, and his column called **Trials and Errors: Ham Life with an Amateur** continues to be a popular read each month on QRZ.com

Read Dave's column at:

<https://www.qrz.com/trials-and-errors>

FUN AND GAMES!

Crosswords, Word Search, etc.



Word Scramble Challenge! Print this page to play!

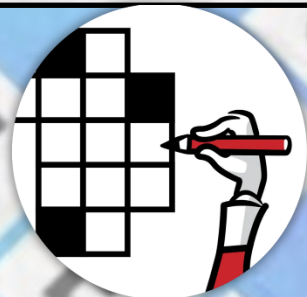
1. TSARRMNEITT _____
2. CEVEIRRE _____
3. EETEOANRGNIR _____
4. NTIAEIOTORN _____
5. RNEOOTMTETPEI _____
6. RSOTRESI _____
7. ARSAFTLREHLIC _____
8. CCOTIRPAA _____
9. SLOPSOCOCIEL _____
10. RENGILOW _____
11. TTERTAUAUN _____
12. HNMLMAUADR _____
13. ONEECSRAN _____
14. CSLOIRLTOA _____
15. ETYHONEDR _____

WORDS TO FIND:

Regeneration Orientation Transmitter Potentiometer
 Resistor Hallicrafters Capacitor Receiver Oscilloscope Longwire
 Attenuator Hammarlund Resonance Oscillator Heterodyne

FUN AND GAMES!

Crosswords, Word Search, etc.



Answer Key... but don't cheat!

1. TSARRMNEITT _____ Transmitter
2. CEVEIRRE _____ Receiver
3. EETEOANRGNIR _____ Regeneration
4. NTIAEIOTORN _____ Orientation
5. RNEOOTMTETPEI _____ Potentiometer
6. RSOTRESI _____ Resistor
7. ARSAFTLREHLIC _____ Hallicrafters
8. CCOTIRPAA _____ Capacitor
9. SLOPSOCOCIEL _____ Oscilloscope
10. RENGILOW _____ Longwire
11. TTERTAOAUN _____ Attenuator
12. HNMLMAUADR _____ Hammarlund
13. ONEECSRAN _____ Resonance
14. CSLOIRLTOA _____ Oscillator
15. ETYHONEEDR _____ Heterodyne

WORDS TO FIND:

Regeneration Orientation Transmitter Potentiometer
Resistor Hallicrafters Capacitor Receiver Oscilloscope Longwire
Attenuator Hammarlund Resonance Oscillator Heterodyne

CLOSING REMARKS



W7DK

ABOUT THIS PUBLICATION

The Logger's Bark is the official publication of the Radio Club of Tacoma and is published by RCT, PO Box 11188, Tacoma, WA 98411. The Radio Club of Tacoma is a non-profit corporation as defined by law. All proceeds will be used exclusively for charitable and educational purposes. The Radio Club of Tacoma's Club House is located at 1249 Washington St, Tacoma, WA 98405, phone: 253-759-2040.

EMAILING OFFICERS

To contact any club officer, simply send an email to their call sign @W7DK.org

CONTRIBUTIONS OF ARTICLES & PHOTOS

We WELCOME contributions of articles, guest editorials, blurbs, Hints-and-Kinks, shack photos, QSL cards, memorable contacts, anything of interest to your fellow members. Submit your materials via email to: loggersbark@gmail.com or via US mail to PO Box 11188, Tacoma, WA 98411 Nichrome

RADIO CLUB OF TACOMA REPEATERS

Central Tacoma 2m: 147.28 + PL Tone 103.5
Central Tacoma 70cm: 440.625 + PL Tone 103.5
Crawford Mountain: 147.380 + PL Tone 103.5
North Tacoma: 145.21 - PL Tone 141.3

The Loggers Bark **does not** accept AI / ChatGPT submissions

MEMBERSHIP INFORMATION

- [Full-time students](#), licensed or non licensed, up to age 25 are \$20 per year.
- Fees are applicable for the calendar year: January to December
- Lifetime [membership](#) is 20 times the yearly fee you are eligible for. Lifetime [memberships](#) are calculated based on the FULL and ASSOCIATE rates.
- Visit www.w7dk.org For the latest and most current information on events and activities

MEMBERSHIP APPLICATION
CLICK HERE!

HAVE A SUBMISSION FOR OUR NEXT ISSUE?

loggersbark@W7DK.org

BOARD OF DIRECTORS

Board-approved minutes from the most recent meeting



W7DK

Radio Club of Tacoma Board of Directors Meeting Minutes July 3rd, 2024

Meeting called to order at _____ 1902 _____.

Officers and Directors Present

<input checked="" type="checkbox"/>	President	Mike Mikuchonis W7XTZ
<input checked="" type="checkbox"/>	Vice President	Adam Barbera W2NCC
<input checked="" type="checkbox"/>	Secretary	Gary McAdams WG7X
<input type="checkbox"/>	Treasurer	Steve Dightman AF7YD
<input checked="" type="checkbox"/>	Board	Doug Schafer AB7DG
<input checked="" type="checkbox"/>	Board	Mike Drorbaugh W7MKE
<input checked="" type="checkbox"/>	Board	Paul Matney W7PFU
<input checked="" type="checkbox"/>	Board	Phil Pia K7PIA
<input checked="" type="checkbox"/>	Board	Red Cranefield WB7EC

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Quorum? ☐ Yes ☐

Motion for approval of Minutes as previously distributed: Yes

Silent Key or Illness?

Membership (Mike W7XH), reports that Kurt Bigbee KK7KNT is in the hospital. He's back at home now.

President's Field Day Report:

President Mike W7XTZ thanks Mike W7MKE for his leadership with the whole Field Day efforts with particular emphasis on:

IT support, Randy WB4SPB Randy kept us all online for the entire duration of the event.
Tower Crew. The tower crew were all trained at Dave W7UUU's place and because of their training the assembly and dis-assembly of the antenna towers went superbly.
Steve AY7YD tuned, tuned and re-tuned our Yagi antennas to their best ever yet.
Paul W7PFU and Red WB7EC did an excellent job of keeping us fed.
Band captains all knew what they needed to do and they all did it. The stations were always on the air.
Doug AB7DG was our safety officer and every thing went well with no incidents.
Deanna KA7DCX, did a great job publicizing the event.

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President Mike said that it went out very well and was a resounding event!

Secretary's Report (Gary WG7X)

Very little snail mail in the P.O. Box these days. We did receive a bill for the field day Porta-potties.

Adam had a request to shorten the general meeting agenda which will be up for discussion in the new business section of this meeting.

The secretary asks that all BOD members and committee members read the meeting notes and send corrections ASAP.

Treasurer's Report (Steve AF7YD)

See attached reports from Steve AF7YD. We still need an assistant treasurer.

Committee Reports

Membership (Mike W7XH)

Membership stands at 324

Making note of what my duties were when I got involved with membership:

Membership renewal

Create renewal file using Accu 2000, and existing .ezb file and a .csv file from our database.
Print all renewal notices.

Salmon Run

Update Salmon Run Donation form
Update the database (create new table) for the current year
Update the Php file for Salmon Run
Create a letter to send out to the membership
Print # 10 envelopes to send and an #9 envelope for return
Print the new donation form
Print address labels 5160



BOARD OF DIRECTORS



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Board-approved minutes from the most recent meeting

Fold, stuff, label, place postage and seal envelopes
Log all donations to the database
Create a financial record of all donations
Email as many Thank You's as possible otherwise send one via mail

Ballots

Print the file provided by Randy
Fold ballot and membership renewal
Print #10 envelope to send materials in
Print a voting return #9 envelope
Print a membership renewal #9 envelope
Insert both return envelope and the ballot and membership form
Create and print labels 5160, match renewal to label

Additional Duties Over the last year or two:

Active Membership Directory

Create covers and alphabetized membership booklet
Insert photos and bio of Elmers
Insert fill materials to maintain proper formatting
Printed at zero cost 85 directories placed at the clubhouse
Maintain the member directory weekly and provide updates as received

New Member Handbook

Create booklet format
Insert edited information from ARRL
Insert Elmer Board
Insert Photos of elmers and their bio information
Provide information of interest and examples of beginner equipment

Membership Cards

Create file of members needing membership cards or replacements
Use Accu 2000 Barcode program with existing .ezb file and club csv file to generate pdf file

BOARD OF DIRECTORS



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Print cards from pdf file, 30 to a sheet
Use paper cutter to separate the cards
Place cards in laminating sleeve 2x3.5 5mil brand KTRIO
Run cards through a laminator
Print #10 envelopes
Print labels 5160
Fill and prepare envelope for mailing

New activities this year:

Design and had printed at GotPrint

W7DK QSL cards given to Dave Brooks our QSL manager
Birthday postcards
New ham congratulation and invite card
Print return address OL1930AT, address labels 5160, birthday wish labels Spartan LS-02f02f
Prepare appropriate cards and mail monthly

Design forms for our website:

Purchased a package of Tasso extensions for Joomla (our website software)
Created new online membership form that will send pdf to membership and allow PayPal payments
Creating online Salmon Run donation form that will send pdf to membership will also allow taking PayPal payments
Will be creating badge and ARRL forms with the same capabilities after membership renewals and ballots

Email campaign:

I have 2000 email addresses and an excel spread sheet developed by Adam to begin an email campaign.
I have two different delivery methods selected to send bulk emails from.
Coming soon, ok in my spare time, or by November.

Membership Certificates:

Re-created a new version of W7DK membership certificate
Printed 324 certificates on 65lb green border certificate paper Desktop Publishing 11914-100



BOARD OF DIRECTORS

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W7DK

Self-seal photo document mailer 9x12 flat white by zmybcpzck
Printed labels for the entire membership
Labeled and stuffed certificates, making sure that they matched
All new members will receive membership certificates within a month of joining the club

Retention information 2014-2023:

I created a spreadsheet for each year from 2014 until the present. I searched out how many members we lost each year until 2024 which provides a number of current members. Example in 2014 we had 81 new members. In 2024 we still have 15 of those members. Of interest is that in 2014 41 of the 81 members did NOT renew. Also of note was that in 2014 we had 20 promotional members. We did not have a single promotional member convert their membership and stay with the club.

Most every year from 2014 through 2020 we lost about 50% of new members withing that initial year. In 2021-2023 we lost between 20-28%.

Of the 102 promotional members from 2014-2023 only 2 have renewed their membership to full status.

Notable observation: we must do better at building relationships, providing value through activities (POTA, SOTA, contesting, FD), or adding additional training.

Library (Doug AD7AV)

No report. Doug is currently traveling and will be back after the conclusion of his trip.

Training (Stephan AD7AB)

No report. Tech and General classes to resume in September.

VE (John AC7WW)

John had two reports for us in June.

Tuesday June 11th the VE Team graded 22 exams from 13 candidates. Seven Technicians joined the Amateur Radio Service. One candidate upgraded to General. Another passed General and Extra with 100% correct answers. Two other candidates upgraded to Extra with one passing 100 % correct answers. Two candidates did not earn an initial license.

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Thanks to the following VE's for their time and service.

Leonard, KA7NWF, Rich, KK7VH, Rob, K7TGU, Mike, W7XH, Stephen, AD7AB, Whit, KG7LNZ

The next scheduled test session is Tuesday July 9TH 2024

Your VE Team traveled South to JBLM and tested 11 Candidates on Friday June 14. Eight new Technicians joined the Amateur Service. Three candidates passed the Technician and General exams.

Thanks to the following VE's for their time and service.

Rob, K7TGU, Mike, W7XH, Stephen, AD7AB, Steven, AI7QM.

The next scheduled test session is Tuesday July 9TH 2024

Info Tech and Website (Randy WB4SPB)

All systems nominal.

HF Operations(Phil K7PIA)

All equipment operational. HF 1& 2 both good. Phil went through and set some profiles on the flex so that we don't have to remember to set the power levels. Dan reports that the Flex 6400m has burnt components that need to be repaired. Will most likely need to go back to Flex. RCT will evaluate the 6400M to determine whether or not we will have to send it off to flex.

HF 3&4 7610 station is still working fine. Band filters installed at the Flex 6600 works fine.

VHF/ UHF emcomm station working well, please come up and use that equipment for weak signal work too.

See contest calendar for upcoming contests...

HF Committee discussions/actions 6/27/24, Mike W7MKE

In attendance: Al N7OMS, Gary WG7X, Dan KD7SV, Mike W7MKE, Bob AD7LJ

Item 1: Discussed if we should continue to wait for Palstar amplifier or switch to Mercury Lux for immediate delivery.

Mercury LUX may be as much as \$1K more although delivery would be quicker.

The Palstar is a different amplifier type than the Mercury IIS that is at the Flex station plus would match the already existing Palstar Tuner.



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Palstar has an excellent reputation for quality and rugged design.

The Palstar is ordered from DX Engineering, who offer free shipping while ordering from Palstar directly would require us to pay for shipping with no guarantee of faster delivery. The price from DX or Palstar is the same so it's cheaper from DX because of the free shipping.

THE CONCLUSION OF THE HF COMMITTEE IS WE STAY THE COURSE AND WAIT FOR THE PALSTAR EVEN IF WE HAVE RECEIVED NO INDICATION OF A SHIPPING DATE AS YET.

Item 2: Reconnected the Flex 6600 which was disconnected to take to FD because the 6400M had issues. No issues noted with the 6600 when reconnected. It was not used at FD after all.

Bob AD7LJ took the new band pass filter and interface home to check if the interface would work correctly prior to installing it to the IC-7610. He will return it next week as he cannot be here Saturday 6/29.

Item 3: Issues with the 6400M

Discovered at FD that the 6400M has same issue as the 6500 had with input from antennas being unreliable.

It could work phone with short transmissions but CW and FT8 caused the 6400 to completely shut down.

Item 4: Installed the IC-7300 in the Lou Room.

Discussed which radio to install in Lou Room, the Flex 6500, the IC-7410, the Elecraft K3 or the IC-7300. Chose the IC-7300 as it has previously been requested for that location.

Considered changing the Lou Room radio on a rotation basis to afford alternate radios for use and to keep working components from degrading from long shelf life. Perhaps rotate each quarter? Will ask around for opinions on rotation.

Tower (Nick K7MO)

Adam W2NCC reports that preparation for the galvanization is almost done. All the excess stuff hanging off the tower has been removed to provide space for the professionals to do their job. Adam will be looking for a ground crew to assist with removal and installation of parts on the tower. August is the target month for Harrington Ariel to do the work. Standoffs for the 40 is on and 80 meter standoff is awaiting parts. Other nagging problems on the tower will be addressed after the maintenance work is done.

Repeater Ops (AL N7OMS)

Al reports: The repeater cabinet was in the Lou room but was moved to the classroom for some reason. At this point it does not work and needs parts that are hard to find in good condition. We recently installed a Motorola at the Bates site which is where the GE Master II was supposed to go. Your repeater team has been discussing which direction we should go but generally it is away from the GE Master II equipment. Something newer like the Motorola MTR 2000's?

We have a large collection of GE parts and equipment. All of it is in unknown condition. In my first discussion

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with one of my mentors I was told there are very few that would want that equipment. They related a story about SeaPac and someone that had GE equipment for sale with a just ask sign about price and it was still there at the end of the event.

Last time I looked it would be problematic to find a spot in the garage for the items that are now in the corner of the classroom.

This is just an update and hope to have more and better information sometime after FD about choices the club has. My goal is to generate some choices for the board to look over.

Mike indicated that Rob K7TGU might be interested in the GE equipment.

Facilities Management (Adam W2NCC)

- Repeater equipment moved out of the classroom. Went to the garage. Last Saturday, we had a clean out of equipment. During the cleanup we received another two donations, one from Jim Hatfield W7SSS' and another donation of a generator from BJ WA7WJR. This is totally a work in progress. Paul K7OSS did a great job of spearheading the cleaning and rearrangement of people and equipment.
- Garage cleanup. Manny AD7MA took some pix of the equipment that needs to go, and it will be going out as time permits. This will be assisted by Dave W7UUU who offered to put some of the stuff on QRZ,
- Roblees upgraded our alarm system. New modules have been connected. New smoke detectors will be necessary. Adam will follow up on this.
- Adam upgraded the keypads clubhouse door locks.
- Work party:
 - o Saturday July 20. Lots of small things that need to be handled.
 - o Benevity Event Setup for the work party.
 - o Bob K7MXE suggested that we remove the shrubs from the front stairway. Discussion ensued with Dan KD7SV about his XYL upgrading the shrubbery.

President Mike asked Adam about the handicap signage needing repair around the clubhouse. Dan KD7SV discussed actual requirements for ADA signage. New, blue signs will be added soon.

Property Management (Red WB7EC)

Red reports that \$227 dollars were taken in this month and most of that was acquired at SeaPac. Red



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appreciates the garage cleanup and mentions that the Jim Hatfield K7SSS estate will be on the property disposal list very soon. Red thanks the people who have been helping the PMT with inventories. Red is looking for help with the PMT

Museum (Dan KD7SV)

Dan reports not a lot of things going on in the museum mostly because of field day activities. Dan is trying to replicate an older W7DK station, consisting of an RME 4350 receiver and an EF Johnson Viking Ranger transmitter. Dan mentions that we have two HT-37's in the garage. Dan is going to look at both at them and let the worst one go.

Wednesday Workshop (Randy WB4SPB)

To be determined, probably be another technical roundtable.

General Meeting (Dave W7UUU)

The July 13th program will be Patrick Bolan, KJ7ZSU, the head of Geochron clocks. He will give a brief history of Geochron back to its founding and the mechanical clocks. Then he will explain how the modern systems work, and about the "Ham layers" that can be added to a Geochron 4K system

Dave is still looking for someone to take the general meeting job off his hands. Also still need assistant Treasurer and PMT members.

Unfinished Business:

Continuing discussion on whether to join the Tacoma Historical Society. President Mike gave feedback indicating that we don't wish to do this. Doug Schafer reiterated his idea about shelving this for the present and saving it for possible high expenditures. The decision was made to not follow up with the Tacoma historical society. The idea was formally tabled.

GMRS - W2NCC

Adam W2NCC shared a presentation on the GMRS research project. GMRS had been mentioned in a previous BOD meeting, so this follow-up is presented as unfinished business.

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GMRS Research:

As an experiment, a GMRS Radio has been installed on the RF Lab bench. Many club members have GMRS licenses, and many do not. This experiment is a way to better understand the GMRS community.

Making the Connection:

Andy KE7RTB was the person that taught me the value of GMRS.

KE7RTB Andy Willms lead the way in connecting GMRS uses to Ham radio at the Radio Club of Tacoma

He is Dual licensed Amateur Radio and GMRS

In 2022 Andy hosted GMRS use at the clubhouse 2 or 3 times

Commonality

Amateur Radio

- Wireless / FM Phone
- Requires FCC license
- Part 97 – Required to used FCC call sign to identify station
- Repeaters
- UHF Band

GMRS

- Wireless/ FM Phone
- Requires FCC license
- Part 95 - Required to used FCC call sign to identify station
- Repeaters
- UHF Band

Both services operate in the UHF spectrum, ham radio offers more flexibility and freedom, whereas GMRS is more straightforward and has limitations imposed by FCC regulations

GMRS Demographics

GMRS users are typically families.

Support outdoor hobbies.

Emergency preparedness.

The GMRS community tends to attract a broader audience, including women, families and young people.

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Entry into Amateur Radio

Many Radio Club members had prior wireless experiences before joining the ranks of the Amateur Radio community.

- Military service – Communications /radio experience.

- Citizen band (CB).

- General Mobile Radio Service (GMRS).

- Connect through a friend or personal research.

Getting Involved

- Assist in hosting and leading GMRS Ham Tech Training nets

- Hosting GMRS net

- Marketing the Radio Club of Tacoma training classes and testing sessions to the GMRS community

The board then discussed GMRS.

Adam W2NCC asked; The radio club is not marketing Tech training classes and testing sessions to the GMRS community, why? This is an FCC licensed community of radio operators who are on the air. We should be looking at this community to understand how we can identify users who are interested in moving over to Ham Radio. GMRS users who attend nets are very active. Making announcements on nets about Tech training classes and testing sessions is reaching some of the most active GMRS users in the community.

Benevity Adam W2NCC

Benevity – W2NCC The events are volunteer events, employees who volunteer to come to events to get Benevity points/ cash they can do this at any time, and for every hour that they volunteer RCT gets money.

Configuration update Adam W2NCC and Dave W7GEL have been working on this and it is now working. Creating Volunteering opportunities when we do something around the clubhouse, we need to consider setting up a Benevity opportunity to receive funds for their time.

Employers using Benevity can now see RCT on their website(s) which allows them to donate time to us.

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New Business.

President Mike has this request: Rev Dr. Doug wants the repeater committee to consider moving the repeater equipment so a TV screen with rotating pictures of club history can be placed.

Mike, W7MKE has these items:

Confirm committee head for the December Awards banquet. We already have a site, thanks to Doug Schafer.

Mike Drorbaugh and Gary McAdams will work together on the booklet. Paul K7OSS will be the head of that committee... President Mike W7XTZ will generate the awards, except for the Doc Spike award. The Doc Spike award is normally headed by the last awardee. **Done**

Start thinking about Salmon run. September is not that far away. Mike Isakson will be looking for help with this important event. Mike is working on the paperwork side; Gary will handle operators and equipment.

Done

President needs to appoint the annual nominations committee. **In progress...**

August Picnic is Sunday August 4th. Ft. Steilacoom Park. **Done.**

Adam W2NCC proposed a smaller agenda for general meetings in the future. Items to be listed in the new agenda Flag Salute, Silent Key, Executive reports Secretary and President. Important items coming up, Chair head announcements and Member Questions...

Done.

Activity Reports, Discussion Topics, Announcements.

Adjournment at: _____ 2121 _____

Secretary, Gary McAdams WG7X

Attachments: Attendance roster, financial reports. membership lists.

RADIO CLUB of TACOMA
ATTENDANCE SHEET
BOD Meeting
June 5th, 2024

BOARD OF DIRECTORS



W7DK

Board-approved minutes from the most recent meeting

	NAME	CALLSIGN	RCT NUM
	ATTENDED at Clubhouse	Only non BOD members BOD at top of minutes.	Applies to ZOOM and at clubhouse.
1	David Stillwell	AC7KP	2073
2	Mike Isakson	W7XH	2657
3	Dan Vacanti	KD7SV	2640
	ATTENDED via ZOOM		
1	Randy Myers	WB4SPB	2050
2	Red Cranefield	WB7EC	2561
7	Phil Pia	K7PIA	2681
8	Dave Ellison	W7UUU	743

RCT Look At member Retention numbers, from Mike W7XH

Beginning New members 2014 81						
member type	Full	Senior	Associate	Student	Family	Promotional
2014	-41	12	2	2	1	18
2015	-6	4				2
2016	-3	2				
2017	-6	3				
2018	-1					
2019	-1					
2020	-3					
2021	-3	1				
2022	0					
2023	0					
2024	15					

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Beginning New members 2015 52

member type		Full	Senior	Associate	Student	Family	Promotional
2015	-26	9	2			1	14
2016	-3	1	2				
2017	-3	1	1			1	
2018	-1					1	
2019	-2	2					
2020	-3		3				
2021	-4	1	2			1	
2022	0						
2023	0						
2024	9						

Beginning New members 2016 38

member type		Full	Senior	Associate	Student	Family	Promotional
2016	-10	3					7
2017	-10	3		5		1	1
2018	-1	1					
2019	0						
2020	-1		1				
2021	-3		3				
2022	0						
2023	0						
2024	13						

BOARD OF DIRECTORS



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Board-approved minutes from the most recent meeting

Beginning New members 2017 38

member type	Full	Senior	Associate	Student	Family	Promotional
2017	-21	7	1			13
2018	-4	2	1		1	
2019	-4	3	1			
2020	-2	1	1			
2021	0					
2022	-2	1	1			
2023	-2		1		1	
2024	3					

Beginning New members 2018 37

member type	Full	Senior	Associate	Student	Family	Promotional
2018	-18	7	1		1	9
2019	-1	1				
2020	-3	2	1			
2021	-3	1	2			
2022	0					
2023	-3	2	1			
2024	9					

Beginning New members 2019 58

member type	Full	Senior	Associate	Student	Family	Promotional
2019	-28	5	4			19
2020	-7	4		1	1	1
2021	-2	1	1			
2022	-4	2	2			
2023	-1	1				
2024	16					

Next up: Treasurer's reports on RCT's Financial condition through June 2024. From Steve AF7YD

Club financial information is available to members—please direct questions to the President or Treasurer

BOARD OF DIRECTORS



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Board-approved minutes from the most recent meeting

Beginning New members 2020 35

member type	Full	Senior	Associate	Student	Family	Promotional
2020	-14	12				2
2021	-8	3	3	1		1
2022	0					
2023	-1		1			
2024	11					

Beginning New members 2021 40

member type	Full	Senior	Associate	Student	Family	Promotional
2021	-7	1	3			3
2022	-12	6	5	1		
2023	-4	3	1			
2024	17					

Beginning New members 2022 59

member type	Full	Senior	Associate	Student	Family	Promotional
2022	-16	10	2	1		3
2023	-17	11	3		1	2
2024	26					

Beginning New members 2023 54

member type	Full	Senior	Associate	Student	Family	Promotional
2023	-16	7	1			8

GENERAL MEETING

Board-approved minutes from the most recent meeting



W7DK

Radio Club of Tacoma
General Meeting Minutes
July 13th, 2024

Meeting called to order at _____ 1300 _____.

Officers and Directors Present

<input checked="" type="checkbox"/>	President	Mike Mikuchonis W7XTZ
<input checked="" type="checkbox"/>	Vice President	Adam Barbera W2NCC
<input checked="" type="checkbox"/>	Secretary	Gary McAdams WG7X
<input checked="" type="checkbox"/>	Treasurer	Steve Dightman AF7YD
<input checked="" type="checkbox"/>	Board	Doug Schafer AB7DG
<input type="checkbox"/>	Board	Mike Drorbaugh W7MKE
<input type="checkbox"/>	Board	Paul Matney W7PFU
<input checked="" type="checkbox"/>	Board	Phil Pia K7PIA
<input checked="" type="checkbox"/>	Board	Red Cranefield WB7EC

NOTE: These approved meeting minutes are reproduced here without any alterations other than to fit the available space, and to redact dollar amounts per Board rules. All language, punctuation, and spelling are exactly as submitted to the editor.

Quorum? ☐ N ☐ (10% of membership required to conduct business)

Flag Salute led by: Adam W2NCC

Silent Key or Illness?

K7HW Cecil (Al) Burleson is in homecare.

Bruce WE7P had a fall at the clubhouse last Saturday. He is OK and recovering at home.

Adam's Presentation on the new agenda:

Small changes in the agenda; long story short we're cutting down the stuff on the agenda. Mostly the committee reports and stuff like that. This is not the final iteration; it is open to changes. The BOD meetings will have all the business records and will be in the club newsletter.

President's Report Mike W7XTZ:

President Mike had nothing at first. But then, Nick K7MO and Anna K7ANA showed up and we were all glad to see them; it's been a long time since Nick was able to come to a meeting. President Mike W7XTZ welcomed Nick and Anna!

Secretary's Report (Gary WG7X)

GENERAL MEETING

Board-approved minutes from the most recent meeting



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Very little snail mail in the P.O. Box. We did receive a bill for the field day Porta-potties, and at the time of the meeting, we had also received a couple of new applications, and some mailed out certificates returned from the Post Office that need to go back to membership.

A request to shorten the general meeting agenda was made and adopted at the July 3rd BOD meeting. This agenda is made to the new specifications.

General Meeting (Dave W7UUU)

The July 13th program was Patrick Bolan, KJ7ZSU, the head of Geochron clocks. He gave a brief history of Geochron back to its founding and the mechanical clocks. Then he explained how the modern systems work, and about the "Ham layers" that can be added to a Geochron 4K system.

It turns out that there are many different layers that can be accessed in the digital version, which runs on a proprietary computer system. All the data that is on the GeoChron are available publicly, but the GeoChron puts all this information at your fingertips at 4k resolution. All this and at a fairly low price. (around \$400)

Dave is still looking for someone to take the general meeting job off his hands.

Chair/ Committee head announcements:

Al, N7OMS reports that all the repeaters are working, including the "Bates" machine that has been in maintenance for a while.

Adam W2NCC reports a work party at the club house July 27th 10 am last Saturday of the month. General maintenance on the agenda.

Important items coming up?

Salmon run is coming up. 3rd weekend in September. HF committee member, Gary WG7X explained how this works and explained that we ask the membership for donations, and they can be donations for specific reasons such as a particular county and the amounts are determined by the members. Gary also explained that even if we are in the multi-two category, we can still use the third station to listen for multipliers.

Member Questions?

GENERAL MEETING

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Door prize, a kit multi-meter, was won by Kathryn K7USR

Activity Reports, Discussion Topics, Announcements.

Nothing offered.

Adjournment at: _____1415_____

Secretary, Gary McAdams WG7X

Attachments: Attendance list.

[next page]



GENERAL MEETING



Board-approved minutes from the most recent meeting

W7DK

ATTENDANCE SHEET

General Meeting

June 13th, 2024

	NAME	CALLSIGN	RCT NUM
	ATTENDED at Eagles	Only non-BOD: Officers & BOD at top of minutes.	Applies to Eagles only this time.
1	David Stillwell	AC7KP	2073
2	Leonard Burstiner	KA7NWF	2308
3	Manny Adonis	AD7MA	3028
4	Stephen Morton	AD7AB	2127
5	Randy Myers	WB4SPB	2050
6	Walt Morey	WA7SDY	2763
7	Kathryn Antonetti	K7USR	2721
8	Phil Shideler	KC7PS	2853
9	Cathi Korth	KG7RTQ	2789
10	Bob Heselberg	K7MXE	461
11	Ollie Bond	AD7CC	2211
12	Florena Bond	Visitor	
13	Alan Ferguson	N7OMS	2107
14	Wade Marshall	W7ITL	2796
15	Dave Ellison	W7UUU	743
16	Diane Sim	W7SIM	2304
17	David Ashley	W7GEL	2987
18	Nick Winter	K7MO	640
19	Anna Winter	K7ANA	2228
	Via ZOOM (@ Clubhouse		
1	Doug Schafer	AB7DG	2879
2	Phil Pia	K7PIA	2681
3	Bruce Perrussel	WB7TVS	2297